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PROCEEDINGS
OF THE
FIFTH INTERNATIONAL CONFERENCE
OF
AGRICULTURAL ECONOMISTS



MACDONALD COLLEGE, QUEBEC

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OF THE
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OF
AGRICULTURAL ECONOMISTS

HELD AT
MACDONALD COLLEGE
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PREFACE

THE writing of a Preface to this volume of the *Proceedings of the Fifth International Conference of Agricultural Economists* provides a welcome opportunity of acknowledging some of the many debts owing to those who contributed in a variety of ways to the success of the Conference at Macdonald College, Canada, in August 1938.

This meeting, the second on the North-American continent and the first in Canada, attracted the largest attendance yet. Over 500 members and visitors were present during the week, and in all 23 countries were represented. Macdonald College, the fifty-year-old endowment of Sir Wm. Macdonald, was an admirable choice. The buildings conveniently grouped, and the wide campus with its lawns and shrubbery, golf course, tennis courts, swimming pools, pitches for baseball and cricket, and with the river flowing in front, not only made easy the accommodation of so large a company but provided an ideal environment. The Conference is deeply indebted to the authorities of Macdonald College and McGill University for placing the College at our disposal, and to the Registrar and the staff of the College who spared no effort to meet the many and varied demands placed upon them. A special word of thanks is due to the Macdonald College Troop of Boy Scouts for their keen attention to our needs and for their diligent service during the whole week.

The International Conference of Agricultural Economists is an unofficial organization in the sense that it is not financed by Governments, nor do its members attend as the official spokesmen of their Governments. The scientific and non-political character of the Conference is one of its most valuable features and one which the Council has always sought to preserve. Nevertheless, the sympathy and material assistance available from their Governments are essential for the attendance of many members, and I should like to acknowledge our deep indebtedness to all those Governments which at a time of international tension made it possible for their nationals to attend and take part in the Conference in Canada. Particular thanks are due to the Dominion Government of Canada for its interest and support of the Conference from the outset, and to the Provincial Government of Quebec for the assistance and facilities given for the tour in Quebec and in other ways. The members and visitors at the

Conference were the guests of the Quebec Government at an official banquet at Macdonald College, attended by M. Dessault, Minister of Agriculture for Quebec.

As at previous Conferences, the tours before and after the Conference were invaluable as a means of seeing at first hand the background and problems of agriculture in the country in which the Conference was held. In the week preceding, a party of members enjoyed a varied tour of parts of the province of Quebec. The work of arranging this tour fell on M. H. C. Bois, Coopérative Fédérée de Québec, and M. J. T. Lamontagne, Department of Agriculture, Quebec. M. Lamontagne fulfilled the arduous duties of conducting the tour. In the week following the Conference a party of members travelled through the province of Ontario, Canada, and New York State, U.S.A. The arrangements for this tour were in the hands of Mr. C. W. Riley, Ontario Agricultural College, Guelph, Ont., Dr. V. D. Hart, Cornell University, Ithaca, N.Y., and Mr. Charles A. Taylor, Cornell University, Ithaca, N.Y. Mr. Riley acted as conductor to the party.

Another tour lasting three weeks was arranged for those members who wished to see western Canada and something of farming problems in the middle-west of the U.S.A. Their journey included visits to Ottawa and Toronto and then to Winnipeg, Regina, Saskatoon, and Calgary in the prairie provinces. Following a short visit to Banff and Lake Louise the party returned to Winnipeg and from there proceeded to the University of Minnesota, the University of Wisconsin, Chicago, and the University of Illinois. The work of organizing the tour in western Canada was undertaken by Major H. G. L. Strange, Winnipeg, and Dr. H. C. Grant, University of Manitoba, Winnipeg. In the U.S.A. arrangements were made by the Universities which were visited; at St. Paul, Minnesota, by Professor O. B. Jesness and members of the department of agricultural economics; at Madison, Wisconsin, by Professor Asher Hobson and members of the department of agricultural economics; and at Chicago and Urbana, Illinois, by Professor H. C. M. Case and members of the department of agricultural economics.

The proceedings of the Conference were conducted in English, German, and French and were facilitated by the use of a head-phone system of simultaneous relay in all three languages. The Conference was again indebted to Dr. Max Rolfes for all the German translation and relay. The French translation was prepared by interpreters placed at the disposal of the Conference by the Quebec Department of Agriculture, and the relay was done by M. J. T. Lamontagne.

The record of the speeches printed in this volume was obtained by electrical recording by the Telecord system.

A conference of this magnitude is not carried through without months of work and anxiety beforehand on the part of the voluntary organizers, nor without strenuous exertion during the time of the meeting. The bulk of the work inevitably falls upon the members of the country which is acting host, and the Conference is deeply indebted to its Canadian members who in so many ways contributed to its success. The task of co-ordinating these various services and the final responsibility and anxiety, in addition to much personal labour, were laid heavily upon Dr. J. E. Lattimer, chairman of the Canadian Committee, Dr. J. F. Booth, chairman of the Finance Committee, and Dr. J. Coke, the Canadian secretary, assisted by Dr. J. B. Rutherford of the Dominion Bureau of Statistics and Mr. T. G. Major of the Dominion Commercial Intelligence Service. The highest tribute to the manner in which they completed their great task was the smooth working of all the machinery of the Fifth Conference. This was due to the detailed attention and efficient organization for which the Canadian Committee was responsible.

The preparatory work for the programme of the Conference was done by the hon. secretary, Mr. J. R. Currie, and the staff of his office at Dartington Hall, and the editing of the *Proceedings* has been the work of Mr. J. P. Maxton and Mr. James Grant, Oxford.

Before its next meeting the Conference will have completed the first ten years of its existence. When the Conference first met in England in 1929 the chief thought in the minds of its promoters was to provide an opportunity for research experts in the field of agricultural economics to meet and discuss the technical problems of their work. Other more general discussions were not neglected at that time, as the *Proceedings of the First Conference* show, nor have later meetings neglected the discussion of technical questions, as the account of the six technical group meetings at the Fifth Conference indicates. The changing circumstances of those ten years have, however, imposed alterations in the scope and the responsibility of agricultural economics that were difficult to foresee ten years ago. The growing public concern with nutrition and with standards of living in general is forcing all nations into attempting to find and establish not only a sound economic foundation for their agriculture but a new orientation to all the problems of rural and urban life and society in general. The day-to-day uncertainties of trade in agricultural products between one nation and another have thrust upon the attention of agricultural economists problems which are common

to all nations and which are of vital international significance. The growth of the International Conference of Agricultural Economists and the gradual development of its programmes have reflected this wider demand for a better understanding of the degree of dependence of nations on one another, for opportunities of learning from each other, and for solutions which are not mutually antagonistic but which will serve to promote closer inter-relations and a more realistic approach to the needs of man and of his world. The International Conference is trying to maintain not just a common meeting-place and programme but a tradition of frank, scientific discussion of subjects—which by their nature have a significance that is political and often national—and an informal atmosphere of international good-fellowship, which are most valuable in fulfilling the functions of the Conference. In many cases, too, the Conference has begun to act as a kind of exchange for the promotion of friendly contacts among agricultural economists over an increasingly large part of the world.

The Sixth Conference will be held in Hungary at the end of August 1941.

L. K. ELMHIRST.

President.

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EDITOR'S NOTE

THE arrangement and presentation of this volume¹ requires no explanation except in one or two minor details.

An outline of the construction of the programme of the Fifth Conference, which determined the character and scope of the contents of the *Proceedings*, will be found in the Opening Address by the President on p. 20 *et seq.*

The order of subjects as they are published differs from the chronological order of the programme of the Conference. For convenience the four main subjects which were given the major part of the time of the Conference have been brought together into one section (pp. 27-315), although they occupied the first, second, fourth, and sixth days of the programme. The other papers read at the full Conference sessions for which no time was allowed for discussion are brought together in another section (pp. 316-400), although they were delivered at different times on the third, fifth, and sixth days of the programme. The departure from the chronological order of the programme creates no difficulties for the reader, and, since the extended discussions on the four main subjects constitute a different type of material and presentation from the non-discussion papers, there is a convenience in the arrangement adopted.

Another minor matter arises in the case of the opening papers of the main subjects. These were printed before the Conference and circulated in advance proof form. It happens that speakers in discussion had occasion to quote passages from the papers as they appeared in the advance proofs. Some of these passages were, however, altered by the authors when the papers were read or were revised subsequently. Where this occurs, care has been taken to note that the speaker is quoting from the Proof Copy. It is safe to say that except in one instance—and there both forms of the statement are quoted by the speaker himself—there is no detriment to the point made by the speaker.

¹ This is the fifth volume of the *Proceedings of the International Conference of Agricultural Economists*. Volumes i and ii of the *Proceedings*, reporting the First and Second Conferences, held in 1929 and 1930, were published by the George Banta Publishing Company, Menasha, Wisc., U.S.A., 1930. Volumes iii and iv, reporting the Third and Fourth Conferences, held in 1934 and 1936, were published by the Oxford University Press, 1935 and 1937.

Copies of all four volumes are obtainable from J. R. Currie, Research Dept. (Economics), Dartington Hall, Totnes, Devon, England; and in Canada and the United States of America from C. E. Ladd, Cornell University, Ithaca, N.Y. Copies of volumes iii and iv are obtainable also from the publishers.

One important part of the programme is not published in full in the *Proceedings*. Two sessions of the Conference were allocated to sectional group meetings for the discussion of special topics of interest to experts in various branches of research or teaching in agricultural economics. Since several of these group meetings were held concurrently, it was impossible to undertake a verbatim record of the discussions. Short statements of the scope of the subjects have been prepared and will be found, together with the names of those taking part, on pp. 401-5.

A photograph, with key, of the members and visitors attending the Conference is placed between pp. 406 and 407, and the register of attendance on pp. 408-13.

The editor wishes to thank all speakers who, despite the distant parts to which they were scattered after the conclusion of the Conference, so promptly revised and returned the transcripts of their speeches.

Particulars of the International Conference of Agricultural Economists, its constitution, and a list of members and correspondents in the various countries will be found on pp. 414-33.

ADDRESSES OF WELCOME AND REPLY

DR. J. E. LATTIMER, *Macdonald College, Quebec, Canada*

IT is a great pleasure to me to act as temporary chairman at this opening meeting of the Fifth International Conference of Agricultural Economists. I do so as chairman of the Canadian Committee which has been responsible for the local arrangements of this Conference, and it is with feelings of great gratification that, on behalf of the Committee, I am privileged to be the first to welcome such a large and representative group of distinguished people. It is also a great personal pleasure to me to welcome to Canada and to Macdonald College the many old friends from other countries whom it has been my good fortune to meet at our earlier Conferences and in other ways.

My primary duty here, however, is to introduce the distinguished visitors and members who are with me here on the platform and who will extend to you a welcome on behalf of the bodies which they represent: Dr. J. J. O'Neill, Dean of Faculty of Graduate Studies and Research, McGill University, on behalf of McGill University of which Macdonald College is a part; Professor R. Summerby, Acting Dean of this College, on behalf of Macdonald College; Dr. H. Barton, Deputy Minister of Agriculture for the Dominion, on behalf of the Canadian Government; M. Henri C. Bois, Co-opérative Fédérée de Québec, on behalf of the Provincial Government of Quebec and the Agricultural Economists of Quebec; Dr. J. F. Booth, Chief of the Economics Division, Department of Agriculture, Ottawa, on behalf of the Agricultural Economics Society of Canada; Professor H. C. M. Case, University of Illinois, U.S.A., chairman of the U.S. council of the International Conference, on behalf of the U.S. members.

DR. J. J. O'NEILL, *Dean of Faculty of Graduate Studies and Research, McGill University, Montreal, Canada.*

Principal Douglas and Dean Brittain have asked me to express to you their regrets that they are unable to be here this evening. I have then the very great privilege of welcoming you on behalf of McGill University to Macdonald College. We are very much alive to the compliment which you have paid Macdonald in choosing this place for your Fifth International Conference. We flatter ourselves that

this is, to some extent at least, a recognition and perhaps an endorsement of the work which is being carried on here.

We in Montreal have watched with much sympathy and a great deal of admiration the development of an outstanding research institute in Macdonald, which has made it much more than an Agricultural College. In my capacity as Dean of Science and also as Dean of Graduate Studies and Research at McGill, I have had an opportunity to watch this development. The problems which have been presented are varied and of wide scope. They are not problems which can be solved ordinarily by any one department; they involve the co-operation of various sciences. That is to say, investigators must either be trained in phases of more than one science, or there must be a close co-operation between various departments of science in the investigation. We realize also the fact that there is a great field of research in what are commonly called the border-line sciences, that is, some place in between the work which is ordinarily carried on by the recognized scientific departments. That field requires, of course, a very close co-operation between departments. I am very happy to say that that co-operation is operative and entirely available in all the departments at McGill, between those at Macdonald College and those located in Montreal, and, further, it is a privilege to acknowledge the very hearty co-operation and assistance of the various Departments of Government—those situated at Quebec, the Federal Departments at Ottawa, and indeed the Departments of Agriculture in all the Provinces of this country.

This Conference is doing very important work. Its work, however, is based upon the use of precise data and ascertained facts; the fewer the variables that enter into your calculations the better your results. Our job is to ascertain as many facts as possible for your consideration, and to eliminate the variables.

McGill gives you a very cordial welcome. We are highly honoured that you have come here. We trust that your sessions will be of great interest and profit to you, that your surroundings here are to your liking, that you are very comfortable, and that you will carry away a memory which will lead you to want to come back again to Macdonald in the not too distant future.

PROFESSOR R. SUMMERBY, *Acting Dean, Macdonald College, St. Anne de Bellevue, P.Q., Canada.*

The first thing that I should do to-night is to apologize for the sort of weather that we are having for you. Perhaps some of you are not aware that the Meteorological Service of Canada is located

in Toronto. As a rule we get very hearty co-operation from that service, but to-night that co-operation is not extended to the point of providing us with the nicest of weather. We hope it will improve.

I am very sorry that Dr. Brittain, Vice-Principal of Macdonald College and Dean of Agriculture, is not here to-night. He would have been very happy to be here to greet you and to welcome you. Unfortunately for us he has to attend a conference in Australia next month, and is at the present time on his way to it.

Before extending you a word of welcome, I think it would be in order for me to give you in a very few words the background of our situation at Macdonald College, something of its origin and its functions. Some of you already know the history and work of Macdonald College, but on the other hand I believe that there are many from outside who do not. Macdonald College was founded by Sir William Macdonald, a wealthy philanthropist of Montreal, who was very much interested in education. His contributions to education in Canada cover a very wide field. To McGill University he contributed funds for several important buildings; he endowed several chairs, established many scholarships, and contributed generously to the upkeep of the University. In addition, Sir William made distinct contributions to the cause of education in Canada by establishing the first consolidated schools, through the introduction of nature study, manual training, and household science in a number of important centres. In later years Sir William Macdonald became particularly interested in rural problems. He had the concept that there were three important institutions of rural life, namely, the farm, the home, and the school. It was for this reason that he established three schools here—a school for teachers, a school of household science, and a school of agriculture. In providing for them at Macdonald College he stated that the purpose was ‘to disseminate information and to advance knowledge with particular reference to rural interests’.

Those of you who know our Canadian system realize that the control of education is in the hands of the Provinces. As far as the School for Teachers is concerned, the function of Macdonald College is to train young men and young women for the teaching profession in the province of Quebec. In the School of Household Science we have two types of course. One of these is designed to give information and training to young women for dealing with problems of the home in an intelligent manner. Secondly, there is a degree course lasting for four years, in which training in the scientific subjects which are basic to home economics or household

science is given. This qualifies students for positions in institutions of one kind or another, and for teaching.

In the School of Agriculture we have three types of work. Firstly, there is the Diploma Course, which is intended to provide farm boys who intend to go back to the farm with information and training that will help them to deal most effectively with their problems. This course lasts for two years. Secondly, there is the Degree Course, in which a much more scientific training is given. In the first two years the sciences basic to agriculture are stressed. In the third and fourth years additional work is given along these lines, and, in addition, training is given along a number of special lines. There are some twelve options available, which men pursuing agricultural work towards a degree can take. Thirdly, there is a considerable number of graduate courses given by our staff in agriculture. This graduate work, however, is under the jurisdiction of the Faculty of Graduate Studies and Research at McGill. Such work leads to the degree of Master of Science or, in the case of a few subjects, to the degree of Doctor of Philosophy.

That gives you an outline of our teaching work. Of course, along with this, and related particularly to the more advanced work leading to higher degrees, an extensive programme of research work that is intended to be of most value to the agricultural population of Canada, and particularly to the province of Quebec, is in progress.

Macdonald College is a part of McGill University. It is financed by an endowment provided by Sir William Macdonald, although I should mention that grants are obtained from the Government for special lines of research work. Macdonald College is national in character. A number of our Household Science students come from all parts of the Dominion, some from the United States, and some from other parts of the Empire. As far as our graduate students are concerned, most of them come from outside of the province of Quebec.

As I have already outlined to you, the founder considered the farm, the home, and the school as the basic institutions of rural life. He aimed to help to produce a happy, prosperous, well-informed, intelligent type of citizen with high ideals of life and a high standard of living. This problem is to a considerable extent an economic one. In a broad sense it is basically economic. With this background, you can understand that we are much interested in your Conference.

We are proud to have you honour us with your presence; we are happy indeed to place our facilities at your disposal; and we welcome you most heartily and very sincerely.

DR. H. BARTON, *Deputy Minister, Department of Agriculture, Ottawa, Canada.*

As Professor Summerby has indicated, it would almost seem as if the warmth of your Canadian reception had already been overdone. However, it is my happy duty to extend to so many representatives of so many different countries a very cordial welcome to Canada. We are very pleased that this Conference is being held in this country, and we are honoured in being among the five countries of the world in which such a conference has been held.

I suppose for many of you this is your first visit to Canada, and we are in the habit of advising those who are making initial visits that, because of the extent of this country, the range in its climatic conditions, and the diversity of its agriculture, one cannot hope to gain a very comprehensive first-hand knowledge in a single visit unless it be an extended one. I do not suppose any such advice is necessary to agricultural economists.

I need hardly tell you, I am sure, that Canada is not without her so-called agricultural economic problems. There are those who think that all Canadian problems really centre in agriculture. And while we hardly expect that a solution of perhaps any of them will be found in this Conference, even extending as it does for a full week and an extra Sunday, we are nevertheless very glad to welcome the opportunity of learning from the experience of others.

I am taking the liberty of giving you a glimpse of agriculture as a whole in Canada in case some of you may not have an opportunity of getting a perspective of it. To many of you Canada is best known in terms of wheat or perhaps more recently in terms of droughts. In order to see what we hope are the remedies for drought and for the return of wheat you would still have to travel a long way west. I have just returned from western Canada where wheat-growing is a highly specialized type of farm enterprise in large areas. The people in those areas are quite convinced, and I am quite convinced, whatever that may be worth, that wheat-growing will continue to be a highly specialized enterprise in those areas, because there is no alternative quite so suitable and because of the conviction that, if wheat cannot be produced successfully and marketed profitably under the conditions which obtain there, despite periodic drought, it cannot be done anywhere else.

Wheat-growing, however, is not the only speciality in western Canada. Live-stock farming is still a major specialized enterprise there. Other specialities are not unknown, but diversified agricul-

ture is rapidly reinforcing a great deal of specialized agriculture, and there are big areas of western Canada where mixed farming has always prevailed. Let me give you some idea of the contrasts that one may find on the so-called prairies of this country. I was examining last week projects which involve the development of agricultural practice in two adjacent areas. The one comprises some 300,000 acres, which will be devoted exclusively to a form of controlled pasture. The other right beside it—the two, we hope, will be complementary and supplementary—is an area of some 4,000 acres on which the intention is to establish some 150 farms. I do not know that any more striking contrast in agriculture could be found anywhere.

Here at Macdonald College you are not in the centre of Canada geographically speaking, but you are in what we regard as the heart and the centre of mixed farming in Canada. You will find dairying is the basic feature with many combinations, but also beef cattle and grain-growing for sale as basic features in other combinations. You will find extensive vegetable gardening; you will find fruit-growing on quite a substantial scale; and with it all, general agriculture. In our Maritime provinces in the east and also in British Columbia, we again have highly specialized types of agriculture, but also with a background of general farming. We can grow a great many things in this country. We are a young, ambitious people, resourceful, we think, and so we have been tempted to commercialize production of a great many of them—perhaps too many. That has brought with it problems of adaptability and instability which only the process of time and experience can solve. From a marketing standpoint, we are favourably situated with respect to at least two of the large areas of population in the world, and that has meant a natural inclination to divide our surplus, since we are an exporting country, between the two. While that has had its advantages, it has also had its handicaps. It has complicated the problem for the agricultural economist, and it has confused the minds of those who are called upon from time to time to pronounce on policy.

I have been interested in your programme. I have observed with some satisfaction that you apparently have deliberately limited it and, I judge, have focused it on the comparatively few considerations which are, in the experience of economists, of vital importance to agriculture. It struck me that it might not be without some significance that, while these problems or these considerations as indicated in the programme are certainly not new, they still appear presumably to be of almost equal importance in both the old and the new

countries. A great deal is expected from the agricultural economists, and I speak as a friend, as one who has faith in the contribution the agricultural economist can make. If agricultural economics is to be a science, I take it it must be an applied science. That means its function must be the solution of problems, and that must be its objective. You will not mind my saying, I am sure, that only in so far as conferences of this kind and the accumulation of data contribute to that kind of objective will that type of activity be justified. I hope that I may express on behalf of Canada the wish that you will enjoy your visit to this country, and that you will not be disappointed in what you see.

HENRI C. BOIS, *Co-opérative Fédérée de Québec, Montreal, Canada.*

It is an honour and a pleasure for me to extend to you, on behalf of the Government and of the Society of Technical Agriculturists of the Province of Quebec, a most hearty welcome and to assure you of our best wishes. You may feel sure that our rural people and the technical agriculturists will follow with great interest the discussions of this Conference. We will derive from them information which will help us in solving our own difficulties.

Quebec, an agricultural province whose ambition is to remain as such, will doubtless benefit from the experience of men who live in countries where the evolution is more advanced and where the problems, the study of which is at its very beginning here, have existed for years or even for centuries. Because of the feeling of brotherhood and fellowship which must unite all men, we are glad of your presence and—if we bear in mind the value of the papers delivered at the past Conferences of your association—we are sure that your stay with us will be beneficial to our community. Therefore, you are twice welcome.

The programme of this Conference shows a firm decision to study economics in relation to the welfare of men. The difficulties of these past years have made it a duty of all those who bear responsibilities towards their fellow-citizens, to look more fully into the final result of economics in the establishment of social welfare. Our agriculture has not been without suffering from the economic disturbances; nor has it escaped, and cannot escape, social maladjustments.

In Quebec, the general aspect of our agriculture and of our rural social organization being a rather unique one, it seems that it would not be out of place to give you a few words about it. The fundamental unit here is the parish. In the country the parish often constitutes a self-sustaining unit. The municipal administration, the

school system, and the religious organization are ordinarily to be found within a fairly limited area. At the small village we usually find the doctor, the notary, the lawyer, sometimes an agronome, the butter and cheese factory, the general store, the branch of a bank, &c. Organized on this plan, the local life is one of particular strength and gives rise to certain initiative which would not otherwise exist.

While the farm of the typical Quebec farmer is not a fully commercialized farm, neither is it a farm organized on the peasant pattern. The good sense of our people, together with historical and economic reasons, is responsible for their having adopted the middle way. Production is diversified. On the typical farm we find milk, bacon, hens, cereals for sale, potatoes, and a certain quantity of other products varying with the local conditions. However, no one of these products is sufficiently developed to permit one to classify the farm as a dairy farm, a truck farm, or a fruit farm. At the same time, large families furnish the necessary labour, and the farmer makes a point of organizing his system so that he seldom needs outside labour. Handicrafts are to be found on several farms, and, should the circumstances require it, the farm could be a self-sustaining unit.

Without turning to a strictly peasant-type agriculture, our people have taken care to avoid the necessity of exchanging each year considerable quantities of products in order to make a living and keep possession of their property. Under these conditions, the depression and the low prices paid for agricultural products in the past seven or eight years have not affected our farmers to the same degree as the farmers of certain other provinces where farms are organized on a purely exchange basis.

In view of the difficulties which they encountered and in order to feel safe in every way, our rural people turned back to a more or less self-sustaining type of farming. These last years have seen an increased interest in rural arts, handicrafts, and types of production which were readopted with the sole purpose of reducing the necessary cash outlays. Our farmers have minimized to the extreme limit their obligation to make outside purchases. So much so that in the worst years they could carry on with lesser sufferings. For a year or so, better days have seemed to be coming, and, as soon as prices rise, our farmers will tend to increase their sales and their outside purchases. Undoubtedly, the low-price period has affected our agriculture, but we can see that the disturbance has been comparatively less in the sections where the farms were organized on a

lesser commercial basis. You will pardon me for having emphasized this aspect of our farming industry. I have done it because it is a typical characteristic and because this point may help you to understand better the Quebecers with whom you may come into contact during your stay.

Again I extend to you a most hearty welcome on behalf of the Government and of the Professional Association of Technical Agriculturists and our best wishes for the success of your Conference.

DR. J. F. BOOTH, *Economics Division, Department of Agriculture, Ottawa, Canada.*

It is a very great pleasure for me on behalf of the Agricultural Economists of Canada to extend a welcome to the members of the International Conference. This marks the tenth year of the existence of the Canadian Agricultural Economics Society, and, although we are still a very small body, it gives us a great deal of pleasure to welcome you here to-night. This also represents the culmination of a dream that had its origin three years ago. About that time the suggestion was first made that the agricultural economists of this country might have the temerity to invite this large body to meet here in 1938. When you decided at St. Andrews in 1936 to come to Canada, you conferred an honour on this country and upon our organization that we all very much appreciate.

We are mindful of the fact that in addition to the members of the Conference who are here, there are many visitors and guests from other countries, and from Canada, and we extend the most hearty welcome to them also.

Having discharged these more or less official duties, may I become a bit more personal? I had the good fortune this last spring to visit a number of the countries of Europe. I met many of the agricultural economists of the United Kingdom and of western Europe. To you who are here to-night and to your associates at home I take this opportunity of expressing a personal word of appreciation for the many kindnesses shown me on the occasion of that trip.

To many of you the English language is not a native language, and you may have difficulty in making yourself understood, and in understanding us, just as I had on my tour through Europe; and if I refer to an experience or two, perhaps you will see some connexion; maybe you, too, will have similar experiences on this continent. I was leaving Cracow, Poland, for Berlin, after having visited Dr. Schmidt, who is with us here to-night, and had been told that if

I went about it in the proper way I might have the whole of a second-class sleeping-car compartment to myself. So I proceeded, with my half-dozen words of German—for I suspected the sleeping-car attendant spoke German—and with many gestures, to make known my desires. After I had been thus endeavouring to make myself understood for some minutes, he turned to me and, in the most perfect English, said, 'Do you by any chance speak English?'

Even those of you who come from the United Kingdom and from other English-speaking countries, perhaps even those from the United States, may find it difficult to understand us, and I think we may have difficulty in understanding you. I am reminded of another experience to illustrate that point. Upon registering in a London hotel I called the information desk to ask if there was a barber in the hotel. The young lady who answered the telephone said, 'I don't know, but I will make inquiries,' which seemed a bit odd to me; but, not knowing the ways of English hotels, I accepted the explanation and hung up the telephone receiver. About five minutes later the porter appeared at the door and said, 'You asked for a Bible, sir?' You may have experiences of this nature while you are here that you may tell to your students, to your Service Clubs, or to other bodies back home, but we all hope that they will not be too embarrassing.

May I add, having referred to our friends from the United Kingdom and Europe, that we are particularly pleased to welcome such a large delegation from the United States? Most of the agricultural economists of your country are known personally to your fellow-workers in Canada, and those of you that are not known personally are known by reputation. Many of our members have received instruction as graduate students in the institutions that you represent. I think they would wish me to-night to express a word of appreciation to you from across the border for the many kindnesses you have shown us in years past.

And now, to all of you from wherever you come, the Agricultural Economists of Canada extend a hand of welcome.

PROFESSOR H. C. M. CASE, *University of Illinois, U.S.A.*

Passing over the ungarded boundary-line between the United States and Canada, you will find no marked change taking place except man-made devices such as customs inspection. Those of us who have had the opportunity to meet the men who represent the agricultural economic interests in Canada in our annual meetings of the American Farm Economic Association and in other gatherings,

feel that we are in a sense a part of a single group. Just as we put aside any thought of national barriers between countries in the International Conference where we are seeking to discuss economic problems for our common benefit, we like to think of our Canadian friends as part of one group with us. I am happy on behalf of our members from the United States to join in welcoming you to this shore of the ocean.

Certainly this is a most happy occasion for us, meeting here on Canadian soil, with representatives to bring us impressions and experiences from so many countries, with the prospect of a free give and take of opinion, points of view, and new contributions to agricultural economic thinking.

I like to stop and consider how fortunate I am to be associated with agricultural economic work. As I see it, agriculture is a world business, and when those who are devoting their best efforts to the economic problems of agriculture get together there is a common tie—a mutual interest—which it would be difficult to find among workers in other lines of activity. To me there is something a little more human in working with agriculture and agricultural people than in working along many scientific lines, or even in other economic phases of national life.

As we view agriculture the world over, we all appreciate that in our own countries a larger proportion of our people are directly dependent upon the agriculture of the country than upon any other single line of industry. What can be more important than to meet for the purpose of discussing policies and matters fundamental to the welfare of those whose living comes from the soil? I am convinced that the level of living which is achieved for agriculture determines in a very definite way the level of living of the nation. More and more it seems to me that, with the spirit of nationalism dominating our economic lives as it does, we must attempt to attain a more balanced economic and social life in our respective countries, and more and more, therefore, is there a necessity of keeping our agricultural house in order, so that it may contribute its whole measure of support to the well-being of our respective nations.

As I look over this group and recognize faces from the United States, I think we have a very representative cross-section of our American agricultural economists with us. From previous association with the International Conference, I am sure that in these pleasant surroundings we have in store for us a wonderful week's experience. It is a real privilege to meet with those who are working on similar problems but under somewhat different conditions in

other countries, and, regardless of what language we speak, to come to know the personalities thinking constructively on agricultural matters in other countries, whose problems are just as real, whose sense of responsibility to their country and agriculture is just as sincere as our own. I am sure we shall use every opportunity which is ours this week of becoming acquainted with our neighbours from other countries who are here with us.

We from the United States and Canada have been brought up in relatively new countries. The way of opportunity has been open to the man who was capable of wrestling with the forces of nature. But as our country has developed we find ourselves perhaps just beginning to face problems which are old to many of you who come to this Conference from overseas. The events which have occurred since the First International Conference of Agricultural Economists bring to me more fully a realization of how valuable an opportunity some of us in the newer countries have, in this Conference, to learn from you who have already long wrestled with the problems with which we are confronted. I fully expect that speakers in this Conference will give a new touch to some points of view, and that some of the inspiration which will come to those who are privileged to attend this Conference will have a very lasting influence on their life's work. As one looks back over the development of agricultural economic work in any country, one can see the shift in emphasis from time to time. In our own country, the emphasis on farm management shifted for a time over to marketing, later to price analysis, then to the discussion of agricultural policies, and we hope with these changes in emphasis that agricultural economics is coming to include a well-rounded consideration of the economic and social problems of our farm people. Coming out of a conference of this kind, I believe we will find increasing emphasis upon the social aspects of agriculture and the well-being of those who receive their sustenance from the land. The problems, however, are too great for any individual to solve, and there is strength to blaze some new trails of thinking in a conference such as this represents.

In closing, I wish to pay special tribute to those who conceived the idea of the International Conference and brought it to reality. Mr. Elmhirst, agricultural economic workers owe a debt to you for the inspiration and material assistance which you have put forth in bringing this Conference into being. It is with deep regret, as we look over the group, that we find there are certain men not present who had such a real part in helping to shape the course of the Conference as did our own Dr. Warren, whom we will not be

privileged to have with us again. In closing, I wish to say, Mr. Elmhirst, that probably our Conference never will represent quite the freedom of give and take, quite the intimacy which was experienced in the initial Conference at Dartington Hall. On the other hand, there is strength in numbers, and it is my belief that this conference is destined to be greater than preceding ones, and that as each conference is called we will have gained much in broadening the interest in our organization and a wider participation representing both more people and more countries.

DR. J. E. LATTIMER.

The previous speakers have left no doubt of the cordiality of the welcome. Perhaps a noticeable omission which I might rectify is that the ladies who are present have not been given a special welcome. We have on this occasion a larger representation of ladies than I think we have had at any previous Conference. You are all acquainted with the report that when some economists first thought of taking up this line of effort, they were met with the remark: 'Do you expect some day to have a wife and family, and what chance is there for assuming such responsibilities if you follow so unremunerative a calling as you propose?' When the study of agricultural economics was taken up the remark was repeated. Now we find not only many agricultural economists who can attend a conference of this nature, but many of them able to bring their wives and families. The latter are welcome, not only for themselves, but also as a refutation of the libel under which we as agricultural economists sometimes suffered.

And now it is nearly time to turn this Conference over to your permanent chairman, the President. Perhaps, I should preface this with a story. A motorist was starting from the seaboard towards Chicago and, as he passed the hilly country, inquired of a native about the road. The local resident said, 'If you proceed a few miles and turn to the right, you will find the best road.' Then he thought it over and said, 'No, if you go back a few miles and turn to the left, you will find the best road.' After thinking a while longer he said, 'No, I guess if I were going to Chicago, I would not start from here at all.' I hope the stage to which my temporary chairmanship has brought the Conference is not as bad as that.

Now we have a little formal ceremony—that of handing over to your President, Mr. Elmhirst, who needs no introduction, the Cowbell which has crossed the pond more often than many of us here and which has been the symbol of authority of the President at all

our Conferences. I hand it over to Mr. Elmhirst and with it the chairmanship of this meeting and of the other sessions of our Conference at Macdonald College.

L. K. ELMHIRST, *President, Dartington Hall, England.*

My first task in taking over the custody of the Cow-bell from Professor Lattimer is to strike a note of sadness. Since our last Conference, two of our most distinguished members have died, Hans Zörner and Dr. Warren. I feel sure that at this opening of our Conference you will wish to pay a tribute to the memory of those great friends who from the first Conference in 1929 did so much to promote the success of our society. To-night I would like to recall not only the services they rendered, but more particularly the sincerity of their friendship and those companionable qualities which made the times we spent in their presence a happy treasured memory.

Hans Zörner was known to most of you. His scientific contributions are published in our Proceedings and will be studied again and again for the thoroughness and directness with which he dealt with his subject; but shall we ever forget how he laughed and how he sang? When I travelled with him in Russia for six weeks he was always bursting into song, even in the middle of the Caucasus. His English favourites were 'Tipperary' and 'Loch Lomond', and many of you will remember that at our Conference concerts he became a co-opted Scot by leading the verses of 'Loch Lomond'. It was characteristic of him that, when he came to our first Conference in Devon, his knowledge of English was only three weeks old and, as he himself used to say, was given a tortuous start by being under the joint influence of a Scot and an American. Yet, by the end of that Conference, he made a speech in English. I do not think we shall so easily carry through any Conference again without him, without his fund of humour, his love of play, and his enthusiasm for the purposes of our meetings.

Of Dr. Warren, how can I hope to express all that his personality meant to our Conference and to me as President? When Dr. Ladd first broached to me in England his idea that an international conference of agricultural economists should be held at Dartington, we agreed to let the decision rest on the approval of Dr. Warren. I well remember the moment when Dr. Warren's reply came, and the die was cast for that first Conference and the movement was set on foot which has grown to this large and representative gathering that we have here to-night from many corners of the earth. Of Dr. Warren, too, I would recall his talent for friendship, his fund of humour,

and his willingness—his eagerness—to join in every form of the social activity that has been the life of our Conferences. Can you picture him swathed in pads and gloves, armed with an unfamiliar weapon, taking the field for his side at a cricket match on the Dartington field? Perhaps I might recall a little experience also at that first Conference at Dartington. It was Saturday night and without any difficulty we persuaded Dr. Warren and Mr. Secretary Wallace to attend a local fair at Dartmouth. One of the shows of the fair was a long tunnel slowly revolving, and the game was to enter at the one end and walk steadily through to the other end without being knocked off one's balance. Warren paid his sixpence and walked in, but the tunnel won, and he was toppled on the floor and rolled about until he was hauled out by the attendant. As soon as he was on his feet again, he ran round, paid his entry money a second time, and had another go. This time he got out on his own, but only by crawling on his hands and knees. That was not good enough for him. Round he went again, and for his third sixpence he walked triumphantly through.

I tell you this story because I think it is typical of the Warren we knew and loved and revered—a man who entered into all the fun of the fair and, in this as in all things, a man who never gave up trying until he had achieved his end. I need not recall his work, his contributions to our proceedings, and his great service to our Conference. These are known to you all. No one has assisted more than Dr. Warren in laying the solid foundations of our society.

I am sure it is your wish that I should send messages from this Conference to Frau Zörner and Mrs. Warren, and to their families.

The audience stood in silence in memory of Dr. Zörner and Dr. Warren.

And now to those friends who for one reason or another have regretfully been unable to be present at this Conference. Last Easter I had the pleasure of spending an evening in his home with our Vice-President, Dr. Sering, and I have a warm letter of greeting to you all from him. His wife and his doctor would not allow him, much as he wished, to cross the ocean to be with us. I am sure you will wish me to convey to him and to Frau Sering your remembrances and good wishes.

I have here a long list of people who have also sent their regrets and good wishes to you. Many of them hoped up to the last minute to be able to make the trip.

From northern Europe we have greetings from Professor Larsen, Denmark; Professor Borgedal, Norway; Professor Björkman,

Sweden; Dr. Jutila and Mr. Lehtinen, Finland; and Professor Starcs, Latvia. Along with Mr. Maxton, I had the pleasure of meeting all of these members and their colleagues during the tour which I made as your President last autumn. Denmark and Finland are represented at this gathering. A representative from Latvia unfortunately met with an accident when he arrived in this country.

From eastern and south-eastern Europe greetings have come from Dr. Brdlik, Czechoslovakia; Professor Ihrig, Dr. Varga, and Professor Kenéz, Hungary; Professor Molloff and Dr. Anderson, Bulgaria (all three countries have extended warm invitations to us to be their guests for the next Conference); Professor Conateanu, Roumania; Professor Evelpedi and Dr. Mussouros, Greece; and Dr. Franges, Yugoslavia. All of these members assisted in arranging meetings of groups of agricultural economists when I visited their respective countries last autumn. Czechoslovakia, Hungary, and Bulgaria are represented at our meeting here.

From central and southern Europe letters of good wishes have come from Professor von Dietze, Germany (who has unfortunately been unable to come to read his paper); Professor Tassinari, Professor Lorenzoni, and Professor Serpieri, Italy; and from Professor Laur and Dr. Howald, Switzerland. All of these I was again fortunate to meet on my tour last autumn or at Easter this year. Germany is strongly represented at our meeting, but unfortunately no one has been able to attend from our groups in Italy or Switzerland.

From the international centres, Dr. Pavlovski, International Institute of Agriculture, Rome, and Dr. von Bülow, International Labour Office, Geneva, send their regrets and good wishes. Both organizations have nominated a member of our Conference to represent them here.

From western Europe greetings have been received from Dr. Louwes and Dr. Smit, Holland; M. Forget and Professor Baptiste, Belgium; Mr. Bridges, Mr. Thomas, Mr. Jones, and Mr. Harkness, United Kingdom. With the exception of Belgium, these countries are strongly represented. Another member who had hoped very much to be present and who had agreed to read a paper, Professor Elazari-Volcani, Palestine, has written to say how deeply he regrets that the situation in his country has prevented his coming and to wish us a very successful conference.

When I look round this gathering, I find it difficult to believe that there are any members in the United States of America who are not present, but I am sure we all share the regret that Governor Myers, Dr. Warren's successor at Cornell, and Professor Andrew

Boss are among those absent, a regret which they themselves have expressed in their letters of good wishes.

Out of all the many letters I have one that I think you will be interested to hear read. In the early days of Cornell University when the Agricultural College was being built up, the Dean had a feeling that there ought to be teaching on farm economics. Admitting that he himself was a botanist and knew nothing of economics, he decided to gamble on a young man whose name was little known at the time. The young man was George F. Warren; the Dean of the College was Dr. Liberty Hyde Bailey. Dr. Warren's death has broken that long association, and I wrote to Dr. Bailey, who is now over eighty years of age, asking him if he would like to send a message to this Conference. This is what he writes:

Dear Mr. Elmhirst,

Your pleasant note of July 30th opens the gates of memory. My early instruction on agricultural subjects in college stressed the chemical basis of it, following the work of Liebig and Boussingault; then the biological base was foremost, after the work of Pasteur and Darwin, followed by the search for new plants and crops; defence against insects and diseases became a major emphasis of teaching and research; study of the physical nature of the soil opened new fields; the place of animals and their products assumed large proportions; betterments in labour-saving and efficient machines and mechanisms came to the fore as subjects of teaching. Then arose the study of labour costs and markets and the notable development of economic studies, to which we are now so hopefully committed.

New social relationships, with direct implications in government, are beginning to emerge. We shall some day uncover the vast subject of the fitness of the individual beyond his technical knowledge, with new intentions in education.

It is stimulating to review all these developments and to catch even obscure vistas. Therefore, I wish you well in your Conference in Quebec and I shall watch the result with confidence.

Cordially yours,

L. H. BAILEY.

And now it is my pleasant duty on your behalf to offer thanks to the speakers this evening who have given us such a warm welcome. We have already had an opportunity to judge of the accommodation and hospitality which Macdonald College is extending to us, and we know that we are going to be exceedingly comfortable. We have been told that all the facilities offered to us are available to the ordinary students in term time, and all I can say is that the students are very fortunate. I hope that Dr. O'Neill and Professor

Summerby will convey to the authorities of McGill University and Macdonald College our gratitude for extending to us these facilities and for their interest in our Conference. I would also ask Dr. Barton to carry back to his Government and to Mr. Gardiner, the Minister of Agriculture for Canada, our respects and thanks for all that the Department of Agriculture in Canada has done to make our meeting a success and to give us every possible facility. I would like, too, to thank Dr. Barton personally for the challenge which he has made this evening to agricultural economics. I think we can say that we gladly take it up.

Those of us who have been on the tour through the Province of Quebec and have had direct experience of the wide variety of services and contacts offered by the Government of Quebec will wish M. Bois to convey to his Government and especially to M. Dus-sault, the Minister of Agriculture for the Province, our warmest thanks for one of the most interesting tours that I think it has been our pleasure to undertake. Will he also convey to those schools, institutions, agronomes, experimental farms, colleges, and so many others who assisted in the tour, our gratitude? I hope that he will not forget to include those living creatures of the Laurentide Park; the trout who responded so hospitably to the bait the visiting economists offered them; the kindly bear with her two cubs who looked in to welcome us at Lac Jacques Cartier; the wild moose who so thoughtfully stood by the roadside that we might see him free in his natural surroundings.

To Dr. Booth for the greeting he has brought from the Agricultural Economics Society of Canada and to Professor Case who, as chairman of the imposing army of members in the United States of America, has so warmly welcomed the Conference to this continent of North America, I express our sincere appreciation and thanks. Nor would you want me to forget Professor Lattimer for his genial chairmanship and his concern for the ladies. While I formally acknowledge his welcome on their behalf, I am sure the ladies will find an opportunity to thank him and Mrs. Lattimer for the special programme which has been arranged.

These words of thanks would not be complete without a final word of appreciation to all those institutions and governments in Europe and elsewhere, who, in a time of great stress and financial difficulty, have generously made it possible for members from overseas to attend. As one of our members expressed it to me, this influx of foreign visitors to this country must be counted in the export trade of Canada. They must accordingly be counted in the import trade of

their own countries, and, when the surmounting of import trade barriers is a matter of some difficulty in the world to-day, we must reckon ourselves fortunate that attendance at our Conference is viewed as a valuable item of trade. One of the last things I remember Dr. Warren saying to me was, 'For Heaven's sake, don't let the Conference at Quebec be a kind of American-British picnic. Try and see that it is truly international.' I am able to report to you that there are sixty members here from some twenty countries overseas. Those of you who know the state of the world to-day at first hand must agree that when governments, in the midst of those areas where the papers daily report rumours of wars, are willing to give facilities for so many delegates to attend, it is a gratifying sign of belief in our Conference and a hopeful indication that faith in true internationalism is not dead.

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OPENING ADDRESS

By the President, L. K. ELMHIRST

AS your President, my chief function in the periods between Conferences has been to attempt to prepare a programme on your behalf. For this meeting I have tried, therefore, to meet as many members as possible. Incidentally this has involved, in North America, two visits to Ottawa, to Washington, and to Cornell, and one to Chicago. In Europe it has meant personal journeys to sixteen countries. I should add here that the success of the tour in Europe was considerably enhanced by the subsequent visit of Dr. Booth from Ottawa, who travelled over much the same ground shortly after Mr. Maxton, Mr. Currie, and I had met the different groups of members.

The programme of our work for this week is the outcome of these journeys. It is divided into three parts. Four days are reserved for four separate but interrelated subjects, for each of which we have two principal speakers, and we have invited six leading men in each main field to take part in the discussion. We have fortunately been able to print and distribute the opening papers in each subject in order to facilitate discussion. We have next a number of what we have come to call 'non-discussion' papers. This does not imply that you are forbidden to discuss them. It simply means that they contain information of especial interest to those of you who are teachers or research workers which might give rise to a variety of questions, but are not intended to promote extended discussion. If you look back through the previous volumes of the Conference papers, you will find that in this way we are slowly building up a valuable body of factual knowledge from all over the world. One of our members said to me yesterday that if he were suddenly parted from the whole of his library, and had to take away with him only the books that he could put in one bag, he thought that he would choose our Conference reports. Now that, from a teacher of considerable reputation, was some compliment to these volumes, and it is one reason why we wish to have at every Conference a series of these non-discussion papers.

The third division of our time will be occupied by group discussions upon special subjects. This is one of the changes upon which Dr. Warren laid especial stress. He always emphasized that one of

our primary functions here is to enable specialists and research men to share and discuss their peculiar problems, to improve their technique, and to agree upon a common terminology, and therefore he was anxious that we should encourage the Conference to have sectional meetings. At Bad Eilsen we made a first experiment with one such group on currency and exchange problems. At St. Andrews we had a specialist group on the marketing of milk. This time we have considerably enlarged the number of these subjects by having two sessions in which three groups meet concurrently. There are, however, administrative difficulties. We cannot make the same adequate provision for translation and reporting as for our full conference sessions. I would emphasize that these group sessions are intended to provide a meeting-place for specialists in certain classes of work. The procedure will be quite informal, but in each group we have provided for a good chairman, an opening speaker, and a recorder to prepare a brief minute of the proceedings.

It would be enlightening, I think, for you to have some explanation of how the four main subjects found their way into the programme. They were selected after discussion with our members in many countries. I suppose the element in the titles which will be strangest to some of you who are keen specialists in the field of economics will be the word 'Social'. I would like to say here that the honours are about even between those who have criticized the President for allowing this word to be mentioned at all, and those who have commended him for introducing it. It looks from that as if somehow we have hit upon a very good basis for vigorous discussion, and this, after all, is what every Conference programme should offer to us.

Social anthropologists and others have begun to point out how wide a variety of social pattern exists in the world and how all these patterns tend to remain stable so long as their basic economic structure remains undisturbed. If this economic base is too suddenly or too drastically upset, the social pattern suffers all kinds of psychological stresses and strains because it still rests upon so many uncharted instincts and taboos, unconscious and subconscious emotions which delay and even prevent that free interplay of feeling and intellect that marks the study of economic forces and pattern. The sudden economic changes of the post-War era have left behind a legacy of psycho-social damage which it may take years of research and education to repair. In the main in rural areas we are to-day dealing with such a condition, since age-long unquestioned patterns of village and rural society are having to face the coming of the

machine and the pull of the great city. We recognize and appreciate the demand of disadvantaged rural folk for all that wide range of social services the city offers, whilst we must deplore our own failure to estimate the basic social and psychological values of rural community life, and regret we have so little alternative to offer.

When the anthropologist and the social psychologist urge a slowing down of disruptive economic change in order to give time for a more sensible social pattern to emerge, we can only admit that, in the pursuit of purely economic factors and research, we have refused to regard many of the social implications of economic policies we were pushing forward as our business or concern. This challenge to attempt a better synthesis with the sociologist, to adopt gentler, broader, more scientific, more sensitive, more psychological attitudes in relating our economic programmes to rural society, is one that we cannot refuse to accept for much longer. The social psychologist is beginning to turn his attention to patterns of rural as well as to patterns of urban life, and we may find in him an invaluable ally. I can think of two significant schemes of research going on at this moment, one at work on a village community in Poland, and another upon a larger community in Scotland. Close examination is being made of the psychological effects of economic changes that have come about through the disturbance in world conditions in the last few years. This disturbance has affected the traditional social structure of almost every country in the world. The work in Scotland is a rather special study into the psychological effects of unemployment on the unemployed and on the whole social pattern around them. It is being carried on not only by a psychologist, but by a historian, an economist, a doctor, and an educationalist. I give you this example because it is not going to be long before others of our social and rural problems will be tackled by co-ordinated groups of scientists. Economists everywhere seem to agree that steady social progress is impossible without economic development, and, on the other hand, that there can be no rapid economic development without social implications—and so I offer no apology for allowing the word 'social' to creep into our main subject programme.

However highly specialized the study and practice of agricultural economics is bound to become, can we refuse all responsibility for attempting to co-ordinate its findings with those of other sciences working in the same field and upon the same human society? Our Conference should surely give us a chance to take a bird's-eye view of the whole field of rural human activity, and to relate our own specialist enterprise to the other aspects of the same field in a

balanced and intelligent manner. The necessity of so doing was forcibly brought to my attention during my recent tour in Europe, from which I will give you one or two illustrations. We were in Hungary soon after a law had been passed forbidding the use of any labour-saving devices or machinery on the farms. You on this side of the Atlantic may smile. But if you were in Hungary to-day, with conditions as they exist, you would realize the difficulty of the position in which the Government is placed, and the kind of problem with which it has to deal in its rural areas. On one experimental station, a fruit farm, we were bidden to look at the finest fruit-tree sprayer yet put on the market. 'Of course,' our guide said, 'this machine is only for showing to students and not for use.' Again, in Bulgaria, we toured a country where over 75 per cent. of the whole population is engaged in agricultural enterprise as compared with 7 per cent. in Great Britain. Their chief problem is how, in such a country, to raise the standard of living of the peasant population. I was surprised and delighted to find how solid a basis Professor Molloff's institute and Professor Anderson's statistical bureau offer for working out sound principles for tackling such a difficult economic and social problem. Bulgaria's chief difficulty is that she has only rural primary products to sell. How is she to raise the standard of living of people who need more roads and schools, and all kinds of expensive social services, unless her people are enabled to exchange their food products for the machinery and manufactured articles they want?

Many other similar cases were brought to my attention during the tour, where social and economic problems were inextricably linked together. In Denmark, for instance, there are a quarter of a million farms, for the most part—as you know—family farms, and some two hundred thousand labourers. One does not ordinarily think of Denmark as a country where farm labour is employed, but these are mainly young men, sons of farmers, who are hoping one day to operate a farmstead of their own. How is that demand for farms to be supplied? Farms of only one hundred acres are still being broken up at a considerable rate in order to maintain a social pattern in which the Danish country people profoundly believe, even though this smaller holding may not be of an economic size to support a reasonable standard of living. In Sweden the movement from the land to the towns gathers increasing speed. So many young girls leave the farm for the city, we were told, that a considerable import trade has developed in single young ladies from Finland who come over to marry the Swedish farmers left behind on the farms. Latvia

and Germany are both dependent on importing a considerable body of labour to work on the farms, from lower standard of living regions. Under such conditions how is it possible to build up a satisfactory economic and rural life? As a final illustration of how the rural social pattern can be affected by economic change I may mention that we have lost 20 per cent. of the agricultural labouring population of Devonshire (England) in the last five years. They have gone to the towns in search of the better houses, shorter hours, higher pay, and wider provision of social services than the countryside can afford.

If we want to begin to study these problems, can we any longer treat the economic aspects and the social in separate compartments? The suggestion in the titles on the programme is not that all the economists should turn into sociologists (God forbid), or that sociologists should all try to become economists (again, God forbid), but that each of us now and then should look up from our specialist research work and glance over the garden wall at what the other fellow is doing with the same basic materials. We might then begin to think a little more in terms of co-ordination and synthesis. For, although the economist may be well advanced in his study of agriculture and its related sciences, we must remember that following hard on his heels come the biologist, the anthropologist, the nutrition expert, the psychologist, the historian, and the gentleman for whom I have not found a name—he is the man, I hesitate to call him an aesthetist, who is beginning to look into the arts and the whole artistic and leisure side of the life of rural people, and to point out what an important aspect this is of a wholesome existence. Now, unless we are going to fall into the kind of general discussion that used to occupy the theologians in the past, and that still occupies many of our economic ‘theologians’ to-day, we must take steps in advance to explore the field where social and economic factors interlock. That is why, in three of the main subjects of discussion, the word ‘social’ is introduced into what is primarily an economic aspect of rural life: ‘Social Implications of Economic Progress in Present-Day Agriculture’, ‘Land Tenure and the Social Control of the Use of Land’, ‘Farm Labour and Social Standards’. This, by the way, is the first Conference in which a session has been given to the subject of labour on the farm, and this fact in itself is a healthy sign of the times.

The continuous rise in the standard of living among rural populations all over the world, that we are now beginning to demand from modern civilization, is not going to be possible without the close

co-ordination of all scientific work in social and economic fields. How can such a rise be achieved without some kind of balanced world economy? This is why our last main topic deals with 'International Trade in Relation to Agricultural Development'.

One of our chief problems to-day is the enormous increase in deliberate control of human effort and social relationship. In the days when *laissez-faire* was in the ascendancy, freedom to pursue individual economic ends meant too often that the social welfare of millions was left to the individual decisions of the few. Once the principle of *laissez-faire* is upset, is there any escape from the need for forethought and planning in every field of social and economic activity, if each individual is to have a chance to flourish? To-day we realize that such social factors as nutrition, health, housing, education, and leisure can no longer be regarded as the private affair of private philanthropy, but are part and parcel of the socio-economic responsibility of the modern state. Can we avoid any longer the attempt to link economic research with a wider understanding of the interplay of social and economic forces? Unless the mainly peasant populations of the world can exchange their products for the services, machinery, and goods of the mainly industrialized peoples, where are they to turn to escape from poverty and fear, and the exploitation that so easily accompanies a low standard of living?

Only yesterday I met one of our United States members who works in the Southern States, and he was telling me of conditions there and in some of the Northern Atlantic seaboard States he has just visited. 'What a disgraceful situation,' he said. 'All these people down in the Mississippi Valley are beginning to turn out the finished products that were yesterday produced by large factories now lying empty, and by skilled men and women now unemployed. On the North Atlantic seaboard people need the primary products which are being produced down in the Mississippi Valley, yet there seems to be no visible bridge to connect these two needs.' Now, if such a lack of co-ordination can exist within the borders of a single ordered nation, what cannot happen where all kinds of political boundaries and national ramifications divide people from people?

Coloured by this continuous interweaving of social and economic forces, the whole pattern of nature and man moves down the story of evolution towards an ever widening field and horizon of human consciousness, both in the world of feeling and of intellect. As this horizon widens, and as the specialization of our knowledge vastly increases, the need for that occasional attempt at synthesis that our

Conference offers becomes more and more necessary. Over specialization without synthesis leads inevitably to an ostrich-like refusal to face the challenge of the universe. Broad generalizations, on the other hand, whether in the social or economic field, without continuous detailed measurement and research, will lay us open to the charge of muddy thinking and woolly sentiment.

A last word about the opportunities that this Conference affords. One special characteristic hitherto has been the free play of objective discussion amongst friends; another has been a wide variety of social contact and experience. The papers and discussions will be printed in a book, but unless you can go away from the Conference with some freshness of vision, some new experience of human relationship, some vivid recollection of games and songs, and unless you use to the full all the facilities that this place provides, you will not acquire that fine and fruitful memory that remains with most of those who have attended Conferences in the past, and for whom the social side of our Conferences ranks very high. We should try to remember that the social pattern of our Conference is as important as its economic structure.

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THE SOCIAL IMPLICATIONS OF ECONOMIC PROGRESS IN PRESENT-DAY AGRICULTURE

FIRST OPENING PAPER

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A YEAR and a half ago Dr. Joseph S. Davis, the retiring President of the American Statistical Association, proposed the establishment of schools of Social Engineering.¹ He directed our attention to a condition familiar no doubt to many, but lacking definition, namely that during comparatively recent years there had developed a need for economic engineers who combine a knowledge of the principles of economics with training in their application. In referring to the relationship of the present-day farm economist, who is primarily a research man, to the job he is often called upon to perform, Dr. Davis states 'we do not expect a physicist to build a bridge or a biologist to treat cancer. No more should we, if we are primarily economists, political scientists, or sociologists, set out to be social engineers or social doctors.'

A year later, at the annual meeting of the same association, Mr. M. L. Wilson, my colleague of to-day, endorsed the proposal made by Dr. Davis. Perhaps one may be permitted to interject at this point that when two distinguished economists who differ so widely on much of what is being done in their own country find a subject on which they can agree it becomes a matter of great interest.

Why did Dr. Davis refer to the need for Social Engineers, and why has this Conference devoted its opening session to a consideration of the social implications of economic progress in present-day agriculture? Why are some of us who never took a course in sociology thinking and speaking on 'social implications'? To find an answer to this question, and to provide a basis for further discussion, it may be desirable to give some consideration to what has taken place in agriculture over a period of years, and to examine the repercussions of this on agricultural science in general, and our own field in particular. Before doing so, however, it may be well to observe that the use of the term 'social' carries with it no suggestion of any

¹ Statistics and Social Engineering: *Journal of the American Statistical Association*, March 1937, vol. xxxii, no. 197.

particular doctrine. It is used in the manner suggested by Funk and Wagnall's definition in the *New Standard Dictionary* as 'pertaining to society or to the public as an aggregate body'.

The development of America and of other New World countries, during the nineteenth century and since, coincided with, and was encouraged by, the recognition and application of the principle of freedom of enterprise, private initiative, and personal reward. Under this stimulus the early pioneers explored and opened vast areas for agricultural settlement and for other productive occupations. During the early part of this period the opportunity of obtaining freedom from the restraints characteristic of many older settled areas, the chance to worship as one pleased, the pride of possessing a piece of land and of establishing a home, the advantages of education and of participation in the upbuilding of a nation were the dominating incentives that impelled countless thousands to forsake the homes of their youth and to seek opportunity in pioneer regions. Monetary reward, though always a consideration, became a much more important factor in later years. Under such circumstances, and in keeping with the spirit of the times, it is not surprising that men and women were willing to face many hardships and to forgo many of the material comforts and social advantages of older established communities.

The advent of a commercial agriculture and the development of an international trade in farm products brought other problems. Natural advantages in production on the one hand, and the availability of markets which such advantages assured on the other, brought in their wake the necessity of providing transportation and marketing facilities, of establishing grades and inspection services, and of ensuring their acceptance by those who produced the product. Faced with these conditions the governments of all the New World countries turned their attention to the provision of legislation that would encourage low-cost production, high-quality products, and efficient, expeditious transportation and marketing. It is probably a safe assertion that during this period, particularly the last half-century, the governments of these countries passed much more legislation and gave a much greater measure of assistance to farmers than was true of legislatures of the older countries.

Throughout most of this period of commercial development, the tradition of self-help and private initiative still prevailed. Legislation was designed to facilitate this and to establish rules of conduct under which the maximum of effort with the least interference might be assured. And, be it noted, most of this effort was designed to assist

individuals directly. Granted, it must be, that the group, the state, or the nation was recognized, but such benefits as might result were expected to accrue primarily and indirectly from enhanced monetary reward to the individual.

A few examples from Canadian agricultural legislative history will illustrate the development described. As early as the first decade of the last century legislation providing for the inspection of beef, pork, and flour for the mutual advantage of buyers and sellers was enacted. In 1807 the licensing of hawkers, peddlers, and petty shopmen was provided for. Wheat and other grains were made the subject of inspection in 1863, and hides and leather the following year. In 1872 penalties were provided for fraudulent marking and misrepresentation. Two years later adulteration was made a crime. In 1884 legislation designed to protect farmers against fraudulent sale of fertilizers, and a year later the first legislation to protect the consumer against low-quality canned goods was passed. Towards the close of the last century and since, milk, butter, cheese, fruits and vegetables, seeds, maple products, hay, honey, feeding-stuffs, and live stock have been added to the list of products made subject to grading and inspection regulations. In the interests of farmers and of consumers, protective legislation dealing with infectious and contagious diseases of live stock, the control of insect pests, and the destruction of weeds has been enacted. The first of such Acts dates back to 1879. Much of the early legislation was permissive or voluntary in character. Many of the more recent enactments provide for compulsory compliance.

Strangely enough, considering the time and place, there appears in the statutes of 1825 an Act providing for the fixing of bread prices, the cost of fuel, and rates of wages.

Grants in aid of agricultural societies in 1830, financial assistance to cover the expense of a hog cholera epidemic in 1834, to provide seed and relief for those suffering from crop failure in 1862, to pay a bounty of one dollar per hundred pounds of raw sugar produced from sugar beets in 1890, to encourage the incorporation of live-stock breeding associations in 1900, and to assist in the construction of cold storage in 1907 are examples of financial assistance provided by Canadian legislatures.

The establishment of the School of Agriculture at St. Anne de la Pocatière in 1859, of Ontario Agricultural College in 1874, and of the Dominion Experimental Farms in 1886 were milestones in the development of agricultural education and of scientific services. The emergence of the Dominion Department of Agriculture and of

similar Provincial bodies, the creation of the Dominion Bureau of Statistics, the formation of the National Research Council, and later the addition of an Agricultural Economics Branch to the Department of Agriculture, are familiar examples of assistance provided for agriculture. Out of this legislation and these various forms of governmental assistance has emerged a far-flung agricultural service embracing graders, inspectors, promoters, agricultural representatives or county agents, scientists, and administrators.

The enumeration of these various measures and forms of assistance serves to illustrate what one country in the group designated as New World countries has done for agriculture. In the United States, Australia, New Zealand, South Africa, and other countries, much the same general development has taken place. The primary purpose of this review, however, is to suggest by reference to legislation the shift in emphasis from the individual to the group point of view. In the early legislation, in almost every field, the assistance provided was for the protection of the individual; it was simple and direct. As the industry gradually threw off the restrictions of a self-sufficient domestic regime and emerged as a commercial undertaking the legislation became more comprehensive, more all-embracing, and its purpose more social in character. Consider for instance the difference to-day with the Canada Grain Act, and the Livestock and Livestock Products Act, both of which not only regulate the trade but establish tariffs for the performance of services; also the Farmers' Creditors Arrangement Act, the Natural Products Marketing Act (declared unconstitutional and now inoperative), the Farm Loan Act, Provincial Debt Adjustment Acts, and legislation to provide for the inspection of farm products. Present-day legislation, though still aimed at the economic betterment of the individual producer and the protection of the individual buyer, has taken on a much broader aspect; it is not an exaggeration to state that producers as a group, consumers as a whole, and the nation as an entity bulk much more largely in the consideration of agricultural policy than was the case during our pioneer and transitional stages.

Evidence of this changing interest is reflected in the development of agricultural economics. We know that some economists trained in the general field evidenced an interest in agriculture at an early date. The writings of some of the ancients, the observations of Arthur Young, and during the nineteenth century the studies of a few European economists, particularly in Germany, were directed towards agricultural problems. Taylor tells us of a meeting of the American Economic Association in 1897 when agricultural questions were the

subject of some discussion.¹ Warren traced the germ of farm accounting in the United States back to 1874, and refers to the birth of cost accounting research in 1902.² The farm survey as an instrument and farm management as an embryo science emerged a few years later, followed by the formation of the American Farm Management Association in 1910.

Within a few years the new association had several hundred members scattered throughout the United States and Canada. This is significant, for in all the years of recorded history probably not over a score of persons with economic training had concerned themselves with the broad economic and social aspects of agriculture. But here was a new science that focused attention on the problems of the individual farm, and was designed to increase farm efficiency; and, having been born at a time and in a place where individualism and the family farm were still the dominant characteristics of agriculture, it flourished. In 1919 those interested in rural economy joined with the American Farm Management Association to form the American Farm Economics Association.

Throughout the first two decades of the rapid development of farm economics in America, major attention was focused upon the problems of the individual farmer. True, there were those like Ely, Taylor, Carver, and Hibbard, and later Nourse and Black, who periodically drew attention to the broader aspects, but it is not an exaggeration to state that national aspects received minor consideration. The contents of the *Journal of Farm Economics* are probably a fair index of professional interests. The first issue of the *Journal* appeared in 1919, but it was not until 1923 that much consideration was given to questions of broad social significance. In the latter year, however, an article by Eric Englund entitled 'Fallacies of a Plan to Fix Prices of Farm Products by Government Control of the Exportable Surplus' proved to be the forerunner of much that was to follow along similar lines. In 1924 the then Secretary of Agriculture for the United States, Henry C. Wallace, in an article entitled 'A National Agricultural Program—A Farm Management Problem', said '... it is not easy to see how even the solution of farm management problems on individual farms can be made to appear to be an adequate national agricultural program under prevailing conditions'. The 'prevailing conditions' referred to were considered to be the

¹ Taylor, Henry C. 'The Development of the American Farm Economic Association.' *Journal of Farm Economics*, April 1922.

² Warren, G. F. 'The Origin and Development of Farm Economics in the United States.' *Journal of Farm Economics*, Jan. 1932, vol. xiv, no. 1.

aftermath of the World War and resulting maladjustments of prices. There is no hint of developments of deeper significance or of more lasting effect.

In succeeding years the contents of the *Journal* became more varied, and reflect the broader interest of the members of the Association. Typical of these articles are the following: 'Some Economic and Social Phases of French Agriculture' by Asher Hobson, July 1924; 'The International Agricultural Crisis' by Max Sering, October 1929; 'Land Reforms in Ireland' by J. I. Falconer, October 1924; 'The Role of Public Agencies in the Internal Readjustments of the Farm' by John D. Black, April 1925; 'A Land Policy as Part of an Agricultural Program' by George S. Wehrewewin, July 1925; 'Rural Depopulation' by T. N. Carver, Jan. 1927; 'The Farm Problem' by Frank O. O. Loudon, Jan. 1927; 'Agriculture Now' by John D. Black, April 1927; 'Which does Agriculture Need—Readjustment or Legislation?' by G. F. Warren, Jan. 1928.

A recital of all the articles of this nature appearing since 1924 would be revealing but repetitious. The climax was reached in the 1938 Convention Proceedings Number when almost the entire issue of 390 pages was devoted to the reports of thirty addresses and subsequent discussion on national and regional policies, international trade, insurance, credit, rural electrification, and 'disadvantaged rural classes'. Two of the articles dealt with farm management questions.

The development already outlined has been paralleled in many of the States of the United States. Typical of those that have made most progress in this connexion is New York State. Here, under the direction of Dr. Warren, whose recent passing we all so deeply regret, farm surveys were inaugurated about thirty years ago. The purpose of such surveys was to study farm businesses, with the objective—and this is important—of increasing farm efficiency. Survey forms were limited mainly to the inclusion of an inventory, a financial summary, and some general notes on management problems. Farm management, as the new field became known, was intended as a service to individual farmers based upon an analysis and comparison of the results of a group of operators. Farm accounting, already recognized, was encouraged, and farmers were persuaded to keep financial records throughout the years. Again the primary purpose was to make the individual farm more successful.

Gradually the purpose of farm management studies began to broaden out, and, with the accumulation of data from many representative areas, a farm management service for agriculture in general became available. Extension specialists in farm economics were

then added, and the consideration of agriculture as an industry became an important undertaking.

The shift in emphasis from the individual enterprise to the group or state interest is well illustrated by developments in the field of land economics. Applying the experience gained in farm management surveys a study of farming in a partially abandoned area was undertaken about 1924. Service to those remaining in this and other similar areas was an important objective of this and succeeding studies, but underlying the programme was a more important consideration—that of determining how such areas could be used to better advantage in the interests of the people of the State as a whole—and out of that work and some preliminary experimental activities of an earlier period, there emerged a State policy in which reforestation and conservation came to supplant agriculture in those sections where farming could no longer be carried on to advantage.

Research in marketing was, like farm management, first considered as a service to those co-operating, and, through the increased efficiency thus encouraged, a means of increasing the returns to farmers. Included in this field of research at a later date were certain investigations of wholesale fruit and vegetable markets. Here the objective was not so much a service to the individual, as it was a question of reorganization and the establishment of a new policy in the interests of producers, consumers, and the trade alike. A State policy with respect to public markets has since been established, based upon this and other activities.

The technique evolved for the study of farm and market problems has also been used successfully in studying the farmer's interest in taxation, rural credit, rural electrification, and public highways. Here, with a minimum of regimentation, State policies with far-reaching economic and social significance have emerged from simple beginnings.

In Canada a similar but somewhat slower development in agricultural economics has occurred. Activities in the Provinces preceded by more than a decade the work in the Dominion field. Little of the work undertaken in the Provinces had until quite recent years passed the stage of farm management surveys and farm cost studies. Land utilization and farm indebtedness surveys more recently undertaken reflect, in the main, emergency conditions but are also indicative of the trend towards a broader approach.

In the Dominion Department of Agriculture, where an Agricultural Economics Branch was established in 1929, efforts were at first concentrated on the building up of basic information through the

conduct of farm management and marketing surveys. Within the past few years, however, research in taxation, credit, land settlement, public market administration, land utilization, and consumer demand indicate an effort to aid in the establishment of agricultural policies of the future. A foundation is now being laid for consideration of some of the questions of greater economic and social significance.

Among those interested in these questions in America, surprise is sometimes expressed that more consideration is not given in Europe to the development of farm economics along lines experienced on this continent. One even hears the statement occasionally that 'there are no agricultural economists in Europe'. Such a statement, of course, is not true, but why should it be made? The answer reflects a difference in development and viewpoint. The development of agriculture in the older countries passed through the stages, referred to earlier in this discussion, long before agricultural economists appeared on the scene. When the economist did finally appear, he found an established society. Instead of having to deal with the growing pains of youth, he found himself faced more frequently with the infirmities of advancing age. When in the course of his professional duties he was called upon to prescribe or operate, his patient was a sick group, a class, or the industry at large. Social maladjustments rather than individual economic problems were his concern. Land reform and the problem of how to feed a nation were matters of more importance than was the question of how to obtain maximum returns on an individual farm. What was best for the individual might not be best for society. Consideration of society, therefore, became the question of major concern.

It must not be inferred that no consideration has been given to the sort of activity which characterized the early development of agricultural economics in America and which appears also to have received most consideration by our New World competitors. Farm accounting had its beginning in Switzerland before it was given much attention in America. In Great Britain, Denmark, Norway, and Czechoslovakia much progress has been made. The application of accounting to farm management and business has in these and a few other countries also received attention. Even in this, however, one discovers that farm accounts in some of these countries are used as a barometer of agricultural conditions and the basis for national action when prices require adjusting or when the food supply of the nation is threatened. It is doubtful if any such use is made of such accounts in America.

Many of the other activities familiar to agricultural economists in

North America are comparatively unknown in Europe. On the other hand, 'agrarian policies' or *Agrarpolitik*, to use the German terminology, has long been the subject of study. Agricultural policies, the condition of agriculture as an industry and its relationship to other industries, were the subject of much consideration in these countries before any similar concern was evident in America. In many of the countries of Europe to-day, one finds in the Ministries of Agriculture and other offices of the governments well-developed departments of economics where agrarian policies are the matters of primary consideration.

In any consideration of this question it must be recognized that the activities of one country or continent are not unknown in another. It is impossible to state that 'this' or 'that' is being done 'here' and not 'there'. All that is intended in this reference is to suggest that in the Old World countries where agriculture reached maturity many years ago, questions of broader import—those of a social character affecting agriculture as an industry and its relationship to other industries or groups—received much earlier consideration than was the case in the New World countries. It must be apparent, however, that this difference is disappearing. The agriculture of many of the newer countries has reached, or is approaching, maturity. It is developing many of the aches and pains of advancing years. It is encountering new obstacles both internally and abroad. Producers themselves no longer think in terms only of their own farm operations. Agricultural scientists in every field, extension authorities, and those responsible for public policies are striving to meet the new conditions. It is to be expected, therefore, that farm economists will change their emphasis in the light of development and grasp new tools in their attack on the problem.

The discussion up to this point has emphasized the changing character of agriculture. Comparisons have been made between different countries. It has been suggested that the complexities of modern agriculture have produced a group, class, or social concept absent in our pioneer and transitional stages of growth. This has been reflected in the changing character of agricultural services in many fields, including economics, and in the legislation enacted and policies adopted by governments. It seemed desirable to outline this development in order to provide a basis for the discussion of some of the manifestations of this change that agricultural economists and those in administrative positions are called upon to deal with. In the rest of this paper a few of these questions will be introduced.

One of the questions of concern, perhaps the principal one, is that of prices. In early pioneer periods this was not an important question. To-day, unfortunately, price is the principal determinant of well-being. Maladjustments in price relationships have become a major concern of governments. Witness the measures adopted in various countries—the control of exchange, the devaluation of currencies, the establishment of central banks, and similar undertakings including price fixing.

It is now a recognized fact that in periods of declining prices those of agricultural products and of other raw materials decline most rapidly and reach lower levels than do the prices of most other things. When they reach such levels as they did a few years ago agriculture is paralysed, the standard of living is seriously affected, social conditions become extremely acute, and the repercussions on society at large are a matter of major concern.

It is not a mere coincidence that L. H. Bailey and others at the meeting of the American Economic Association in 1897, to which reference has already been made, asked, 'Is there a distinct agricultural question?' and then proceeded to discuss mortgage indebtedness, credit, the drift to cities, and other questions. Neither is it surprising that these and other similar questions came in for so much discussion in the early twenties and again in more recent years. To the generally increasing interest in such matters the inequality of prices during such depression periods gave added impetus. Is there any doubt that for years to come governmental policies will be directed in ever-increasing degree towards ensuring price stability, without which in this commercial age there can be little social stability?

Before the days of mechanization and before the scientist made possible the present extension of agriculture into 'one crop' areas, farming was conducted in the more fertile regions where a variety of products could be produced and where most of the comparatively few necessities that must be purchased could be obtained from local craftsmen. This was the condition obtaining until the middle of the last century and later in some of the New World countries.

Under such conditions, depressions and declining prices did not present the problem that such occurrences produce to-day. The depression following the Napoleonic Wars and those of later periods, serious though they were, did not bring forth the efforts to alleviate agricultural distress that more recent disturbances have produced. Governments, under such circumstances, were not compelled to take action on behalf of farmers. The variety of products produced on the individual farm was, in most instances, such as to ensure the

family living. Since all products did not decline with equal rapidity there was usually something that could be sold or traded for the few things that must be purchased. Declining prices and depressions passed without serious effect upon agriculture, and in legislative bodies produced little more than discussion.

The age of agricultural specialization has changed this picture. Industrial development, transportation, mechanization, and scientific achievement have expanded the agricultural frontier and changed the character of agriculture the world over. There are still general farming areas where a variety of products are grown and where, despite commercialization, farmers are still able to carry on with a minimum of assistance in times of economic distress. In most countries, however, specialization in agricultural production has attained some significance; in some the production of a single product, or group of closely related products, characterizes the type of farming in large areas. Wheat, cotton, coffee, wool, sugar, tea, dairy products, and tobacco are examples of such products, the production of which frequently dominates the economy of states and nations.

When the prices of such products decline as they did during the post-War depression, and again during the period 1929-33, the situation becomes serious not only for the producers themselves but for those in secondary industries and in other occupations. Under the extreme conditions of the periods mentioned, large numbers of producers were virtually bankrupted, and the standard of living reduced to a very low point. Political unrest is a product of such conditions, and in some countries violence has taken command.

What should governments do under such circumstances? Sound economics and rigid application of the doctrine of 'the survival of the fittest' suggest that the best thing to do is to let competition and the play of economic forces run their course. In the end the inefficient producer will be eliminated, the unproductive land will go out of use, supply will be reduced, prices will rise, and favourable conditions will again be restored. But is the problem as simple as that when adversity of the type described strikes; and how long can a government remain inactive under such circumstances?

Most post-event descriptions by economists of such activities have been critical; many at the time have opposed government intervention or assistance. Must we recognize a conflict between economic and sociological principles and forces in the analysis and treatment of such cases? Can we justify government action as a 'short run' necessity, and if so, what are the 'long run' consequences? While admitting that certain kinds of activity are ill advised and likely to

prolong or increase the difficulty, can we justify the general principle of state intervention in the interests of groups of agricultural producers?

Before even the process of pioneer settlement had reached its zenith in some countries, others were experiencing the exodus of population from rural to urban centres. At first it was the competition of the New World that caused agricultural abandonment in the Old. Later, the areas first settled in the newer countries began to feel the competition of still more pioneer areas. Finally, improvements in agricultural technique and increased volume of foodstuffs resulted in a relative decline in rural population that exceeded the increases due to settlement still in progress. Even in Canada, in Australia, in Northern Africa, and in other countries where lands are still available, and where transportation and other facilities have been developed to handle larger volumes of farm products, opposition to continued immigration and land settlement has been experienced.

Assuming that economic conditions the world over approach their pre-depression status, that urban industries again resume production on a basis that will absorb the surplus labour that increasing improvements in technology displace in agriculture, what should the agricultural policy of a country like Canada be? Should an attempt be made to prevent the urban-ward movement? Should immigration be encouraged and settlement assisted? Would the social conditions in rural areas be improved if there was closer settlement? Should settlement be encouraged and volume of output increased in order that the nation's physical plant and equipment may be used to greater advantage and costs reduced? Have we certain competitive advantages, including unoccupied areas, that justify a policy of agricultural expansion though other nations find it desirable to curtail production? Or have we even in Canada, as some contend, a surplus agricultural population the removal of which is necessary if economic and social conditions are to be bettered?

During the decade 1921-31 the net rural exodus to urban centres was estimated to have been 408,000. With emigration to the United States all but eliminated and 'assuming agriculture merely holds its own and other rural employment is not forthcoming, a rural surplus of 800,000 is quite within the realm of expectation during the next decade'.¹ It is understood that a similar condition exists in other countries.

¹ Hurd, W. B. 'Population Movements in Canada, 1921-31.' *Proceedings of the Canadian Political Science Association*, 1934.

Machinery contributes to increased agricultural efficiency and thus to a reduction of population engaged in agricultural pursuits. The net effect of mechanization is probably beneficial, but the by-products result in some serious economic and social problems. Mechanization increases the size of farms, eliminates the small inefficient unit, and displaces the employed worker. That it may, in the aggregate and over a period of time, increase employment, enlarge the output, lower the cost and raise the standard of living does not eliminate a very serious transitional unemployment problem. In a report presented to the Permanent Agricultural Committee of the International Labour Office in February last, Dr. Lowry Nelson, of the University of Minnesota, states that mechanization of the wheat harvest has eliminated the need for 250,000 workers who formerly harvested this crop. In the Canadian West a similar development has caused the disappearance of the 'harvester's excursion' that formerly took some 40,000 to the prairies every year and which ultimately led to much new settlement. In almost every field of agricultural production human labour is being replaced by mechanical power and other machinery.

Have the social advantages of urban life so far outrun those of the country that the drift of population is determined by these attractions rather than by the pressure resulting from mechanization and improved technology? Who has not heard of a shortage of agricultural labour in recent years while thousands of one-time farmers and farm wage-earners live on urban relief or eke out a precarious existence on a scanty urban income? What is necessary in rural life to compensate for the city's picture shows, schools, churches, shorter hours, electricity, running water, recreational facilities, and general social advantages? Is it possible or desirable to attempt a programme that will hold more of these people on farms?

The topic assigned us for discussion invites consideration of many other questions. We might deal with taxation and its social implications, e.g. the question of whether or not the present basis of collecting government revenues recognizes the shift of many forms of taxable wealth from rural to urban centres with consequent multiplication of the tax burden on farm properties. We might consider transportation problems, tariff questions, and other matters of economic and social significance, if time permitted.

Some may feel that national policies should be given consideration. What should be said of Great Britain's programme of regulated marketing, of controlled imports and bonused production; of the policy of the United States in restricting production and marketing

to conform with estimated demand; of Italy's efforts to prevent large-scale migration to cities when modernization and improved social conditions in urban centres inspired by governmental programmes widen the gap between peasant and city dweller; of Germany's regulated state with social equality sought by the fixing of wages, margins, and prices; of Canada's endeavour to raise the status of agriculture through the promotion of trade agreements and the restoration of international trade? These policies determine for good or ill the economic and social conditions for millions of producers. But any consideration of national policies and of what sort of a society we want brings us back ultimately to the questions discussed—price stabilization, the problems of areas of specialized production, surplus rural population, immigration and land settlement, the effects of mechanization and improved technology, the equalization of tax burdens, and others. With all these matters under consideration perhaps one may fittingly close an introductory paper with the observation that it is a far cry from the self-sufficient agriculture of a century ago to the highly commercialized industry typical of many countries to-day.

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THE SOCIAL IMPLICATIONS OF ECONOMIC PROGRESS IN PRESENT-DAY AGRICULTURE

SECOND OPENING PAPER

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THIS topic calls for discussion of social well-being in the light of economic realities. The ultimate consideration is social welfare, but, since we are agricultural economists, we approach the subject of welfare from the field of economic facts and organization, and in respect to welfare are most directly concerned with the rural population. Nevertheless, this consideration of the topic assumes that all social phenomena are so complicated and so inextricably interrelated that the separation of phenomena implied by such words as 'economic' and 'social' are valid only so long as they serve the expediences of discussion and the limitations of language. Furthermore, it is an evident fact that in the world in which we live the social welfare of the rural and urban populations cannot be wholly separated. It will, therefore, be seen that even an economic approach must be shaped by social factors that are not in themselves economic; and the consideration of rural social welfare cannot even momentarily ignore its involvement with urban or general social welfare.

This discussion is not so much one of facts or statistics, with which we are all more or less familiar, but of meaning and value in terms of human life. It is a search for the clarification of underlying issues and an attempt at a deeper understanding of them. This is difficult because if we stay on the surface we do not get much beyond naïve phrases. If we probe deeply we are in danger of misunderstanding because of terminology, because of the difficulties in stating generalizations and concepts of value in terms that are readily understood. This is a time when all men in the field of agriculture, consciously or unconsciously, have in the back of their heads their own completely or incompletely thought-out system of social philosophy. They may not, like Plato, write it out; but it is there just the same. When we psychoanalyse ourselves we find our social philosophy is revealed in the form of our attitudes, our unconscious acceptance of folk-lore, our faiths and prejudices, our personal frames of reference, our approaches. Because of this we know how difficult it is in the social sciences to secure scientific, logical

objectivity. To what degree we form our framework of social and moral ideas and then use economic research to justify it is a question some outsider will have to answer.

At the beginning I raise three major questions. They will not be answered fully, nor in one-two-three order, but they should serve to point the direction of this paper.

1. What are desirable goals or ends in farming or in society as a whole, and how do we know that they are desirable?
2. What are some of the present broad trends in world agriculture, and where are they leading in relation to the rest of society?
3. Can the present social, economic, and political trends be harmonized with definite and scientific welfare objectives?

The agriculture of the western world of to-day may be divided into two predominant types or patterns. The first of these may be called self-sufficient farming; the second is commercial farming. Europeans would speak of the former as peasant-type farming. It is of course understood that other points of view would employ criteria upon the basis of which agriculture could be classified very differently, and with equal validity. It is also recognized that there are innumerable degrees and kinds both of self-sufficient and commercial farming, and that differentiations could be almost infinitely refined. Nevertheless, the fundamental distinction between these two types of farming is clear, and consideration of to-day's topic must inevitably give primary attention to the differing social-economic patterns that are involved, their implications as to the rest of society, and their relationship to differing welfare goals that might be agreed upon.

It is pertinent to begin with some observations concerning the two agricultural patterns. Self-sufficient or peasant-type farming is an inheritance from an age of relatively simple technology and economic organization. It not only fitted that earlier age; it was both a product and an integral part of it. Yet in point of numbers of people engaged or of volume of production, its present world importance is greater than that of commercial farming. In 1929 approximately one-half of all American farms received only 11 per cent. of the total cash income from all agricultural production, and 11 per cent. of the total number of farms received about one-half of the total cash income.¹ Subsistence farming is not, however, a phenomenon explainable exclusively in economic language. Both

¹ L. H. Bean, 'The Margin of Economic Security for Farm Families', in *Annals of American Academy of Political and Social Science* (March 1938); also, O. E. Baker, *A Graphic Summary of the Number, Size, and Type of Farm, and Value of Products* (U.S. Dept. Agric. Miscellaneous Publication No. 266, Oct. 1937), p. 68.

economic and non-economic aspects are inextricably entangled. In some cases economic expediences shape cultural development; in other cases economic habits form on the basis of institutions of a non-economic character. In the whole of it taken together there is an integration that has induced men immemorially to speak of farming as not just an employment but as a way of life.

Farmers operating in the pattern of self-sufficient agriculture seek their satisfactions and the fulfilment of their wants largely through their own or their village economy. Their economy is not primarily one of cash and exchange. Inseparably bound up with the economic realities of self-sufficient farming, though not correctly classifiable either as 'result' or as 'cause', is a pattern of life whose virtues have for ever appealed to philosophic reflection. 'Speak to the earth and it shall teach thee,' said Job. In the same tone the noble Virgil sang, in his second *Georgic*, 'O more than happy countryman, if only he knew his good fortune'.

Comparative independence of the market and of the outside world has inculcated in farmers of this type a spirit of sturdy independence and courageous self-reliance. Their struggles and their contacts were more with nature than with the world of men. They fed and housed and clothed themselves largely with the products of their own labour, and they tended in this simple sort of economy to expect gain only as nature might reward their industry and thrift. They were generally secure from the temptation, so common in a more complicated economy, to get profit out of unproductive effort. Father and son worked together in the field, and mother and daughter about the household; parenthood meant common occupations, constant companionship, and day-by-day home-given education. Work was long and hard, but it held satisfactions that were primordial and complete, for

'the blue-flowering field of flax or the crowded sheep in the fold would clothe the family through the next year, and the grain that yellowed in July and the bull calf browsing in the pasture would give bread and meat in the cold winter months. The procession of the seasons meant ploughing, seeding, weeding, harvesting; but it also meant feeling the tingle of rain on the cheek, knowing the secret of where the lark had nested, and seeing the sun rise red out of December dawn. Recreations and social customs were shaped in the pattern. Consider the Harvest Home, the husking bee, the quilting bee, or the custom of the bride going to her new home perched on the ox that drew the bridegroom's plough. Their language, their religion, their standards of conduct and their moral axioms hewed to the line.'

They have for ever distrusted the city and all it stood for, and bestowed their highest moral approval upon the simple things and simple customs familiar to their way of life.

But the world is changing. Under the impact of science and technology institutions are being altered more rapidly probably than ever before. Agriculture has felt profoundly the influence of the new commercial age, and its most perfect response to the new world of technology, of economic specialization and interdependence is the completely commercialized, fully mechanized, highly specialized farm operated as a business and with no standards except market efficiency. In its extreme forms exclusive susceptibility to economic and technological trends has led to such phenomena as suit-case farming. This suit-case farmer sees his land for only a few weeks out of the year. In some of the southern Great Plains regions he comes out late in the summer just in time to hurry his tractors into the single combined operation of ploughing, harrowing, and seeding the winter wheat, and then is gone before the dust clears from his gang. The following June he rushes out from town again, picks up a few itinerant hands, greases the tractors, sets the combines going, and is quickly gone once more. His farmer's thoughts are directed largely to counting costs, cutting expenses, watching the market, and wondering when to unload. He may operate a garage, a store, or a restaurant through most of the year; or if he is lucky he may live the whole year on the profit from his single crop. He has few or no buildings on his land, his home and family are in the city, and he is therefore inclined to oppose taxation for schools, roads, and other public improvements in the locality where his agricultural business is located.

Here, in deliberate extremes, are the pictures of the self-sufficient and the wholly commercialized farms. Admittedly there are relatively few farms to-day that are completely true to either pattern. The fully mechanized and wholly commercialized farm of to-day represents complete surrender to economic and technological forces. The self-sufficient farms that still remain represent the continuing persistence of social forces that are essentially non-economic and non-technological.

There are probably very few agricultural economists who would advocate a policy calculated to develop either of the extremes. To submit promptly and entirely to the forces of economic and technological efficiency is essentially to adopt wholly a creed of economic determinism, and amounts to establishing moral values and social welfare wholly upon an economic basis. On the other hand, to

cling stubbornly to the ideal of the extreme forms of subsistence farming is to deny that the world has changed, constitutes social conservatism in an exaggerated form, and amounts to rearing a moral code upon the foundations of Golden Age nostalgia. The agricultural economists attending this Conference will for the most part take positions which represent various compromises between the two extremes. The differing positions they take will depend largely upon their standards of moral value and their concepts of social welfare. The question, in other words, resolves itself into a question in social philosophy.

Concepts of social welfare have until recently tended to be very vague. Definitions of economics have frequently declared or implied that welfare was the goal or the criterion of economic thought, but the meaning of the term welfare was left open to shifting and varying interpretations. There are, however, trends in contemporary thought and action that give the term specific content. Upon the basis of the findings of the biological sciences it is now possible to establish some minimum goals of economic and social welfare.

Physicians working in the field of social medicine can agree reasonably well upon certain health standards, and upon the biological means of attaining them. Nutrition experts can set up fairly definite standards of food requisite to carry on life processes naturally and well. Psychologists and physiologists, although they disagree among themselves over many details, are none the less able to agree pretty well upon some specific principles relating to such matters as recreation, fatigue, and certain causes of individual maladjustments. Educators will agree pretty well upon minimum standards in education. Sociologists know the conditions that affect the incidence of such phenomena as insanity, crime, and suicide.

These provide materials upon which minimum standards of physical welfare may be scientifically established. It is a point of departure that has great potentialities. Studies like those of Dr. Hazel K. Stiebeling and of Dr. Mordecai Ezekiel are likely to eventuate in new kinds of economic action and realities. Dr. Stiebeling has compared estimates of average diets with physiologically satisfactory diets.¹ Dr. F. F. Elliott, Dr. O. E. Baker, and others have made

¹ *Diets at Four Levels of Nutritive Content and Cost*. U.S.D.A. Circular No. 296; also, 'A Dietary Goal for Agriculture', in *The Agricultural Situation*, xxi. 12 (Dec. 1, 1937), 18-20. Mention should be made also of the Nutrition Problem Studies made under the auspices of the League of Nations, summarized in *Nutrition—Final Report of the Mixed Committee of the League of Nations on the Relation of Nutrition to Health, Agriculture, and Economic Policy* (Geneva, 1937).

tentative estimates of the amount of land that would be required to meet such standards.¹ Dr. Ezekiel translated desirable family budgets into requirements for adequate national consumption, and production data into potential national production. On this basis he demonstrated that the nation has the resources and the techniques to provide a satisfactory standard of living for all our people, without redistributing the incomes of the well-to-do.² The studies made by the Brookings Institution of *America's Capacity to Produce* and of *America's Capacity to Consume* provide provocative material for those who approach the subject of social welfare from the point of view of specific minimum standards of welfare. It has been possible in the past in speaking of welfare to take refuge in fine-sounding but vague and meaningless phrases. To-day it is possible to say with reasonable assurance, 'Here are the definite minimum requirements of food, clothing, housing, schooling, medical facilities, recreation, &c. Here are the facts as to the amount of these minimum requirements that we actually attain. Here are reasonably accurate estimates concerning the amount of these goods that we are fully capable of producing within the limits of our present resources, technology, and organization.'

Two very significant generalizations always develop from the joint consideration of such data. First, comparatively low minimum standards of living would require a great increase both in general production and in the purchasing power of the lower income groups. Second, minimum goals of social welfare including physical, recreational, and cultural standards would not only necessitate increased production, but would involve far-reaching inner adjustments in agriculture and industry. It is difficult to foresee the effect of such information upon economic theory, but it is not hard to predict that widening popular interest in such facts and in this point of view is bound to have a profound influence upon action policies.

For the present there must be much vagueness concerning man's cultural, artistic, religious, and philosophic needs. Nevertheless the biological and social sciences are making progress in this direction, especially in the relationships they are constantly discovering between psychic and apparently intangible phenomena on the one

¹ F. F. Elliott, *Consumption Habits and Production Programs*, an address before the Farm Family Living Section of the National Outlook Conference, Washington, D.C., Oct. 30, 1934. Mimeographed by the Extension Service of the U.S. Department of Agriculture.

² \$2,500 Per Year—From Scarcity to Abundance (Harcourt Bruce, N.Y., 1936).

hand, and very real and measurable phenomena on the other. There is in the process of making a new and integrated science of man. Anthropology was the first science to develop certain very significant new points of view and techniques. In the first place, the study of primitive civilizations and peoples concerning whom there was little previous knowledge and comparatively few prejudices compelled anthropologists to study certain kinds of everyday phenomena which have deep significance yet which in a familiar environment are commonly ignored; and, with no interest involved, it was relatively easy to be objective about them. Secondly, because the obvious kind of social data was frequently rare or difficult to obtain, they were driven by necessity to examine the pertinent data gathered by other scientific disciplines, and to consider and integrate as much as possible all of the aspects of a culture. If you examine a good work in cultural anthropology, you will find that it makes good use of material from all the sciences ranging from geology to psychology.

The new science of man is essentially an extension of the methods and the point of view of anthropology—more specifically, of cultural anthropology. It is still too young to speak with authority. Yet its findings already have a discernible direction, and the tendency of the findings is very pertinent to the present discussion. It is clearly demonstrable that the variety of types of culture, past and present, is not only very great but also illustrates amazing differentiation; it is theoretically indicated that the variety might be infinite. Comparative study of various cultures discloses a strong universal tendency for various traits within a culture, whether indigenous or borrowed, to be integrated and harmonized. Institutions once established have great powers of persistence, even long after their original functions have ended and been forgotten. Out-worn but persisting institutions can cause severe social maladjustments. Such institutions can generally be slowly diverted to serve new ends—even ends wholly contradictory to their original function—more easily than they can be flatly eliminated. It is especially to be noted that so-called human nature and standards of moral judgement, like other culture traits, harmonize with the cultures in which they occur, and over a period of time change just as their respective cultures do.

It is reasonable to expect that within this generation the new science of man will be able to describe certain desirable cultural goals with realistic precision. When it does, social or economic planning can be established on a scientific base. It cannot do that

as yet, but it can with some assurance propose the following principles to influence the establishment of social welfare standards:

1. Orthodoxies of all sorts tend to be rationalizations after the fact.
2. Social patterns and ideologies, and so-called human nature, are almost infinitely variable. These things vary with the environment, and at the same time are part of the environment. Environment may change man, man may change his environment.
3. If new functions are introduced into a culture, they can generally be performed more smoothly by an established institution than by a new one.
4. The established traits of mature cultures are so integrated, and at the same time new social forces and institutional pressures are generally so many-sided and involved, that a policy of following trends of technological and economic efficiency exclusively would at least generally bring about an infinite series of social maladjustments, and would probably be self-defeating for that reason.

We have now prepared the ground for a return to the primary problem, which is: What sort of compromise between the extremes of self-sufficient and fully commercialized farming would be most conducive to the rural and general social welfare?

Although specific minimum standards of social welfare have not yet been worked out in full detail, and above all have not been integrated, we already know enough to be sure that the attainment for the whole population of the very minimum requisite to carry on life processes normally and well would necessitate increased production both of industrial and agricultural goods. There must, therefore, be no backward steps technologically. The general movement must be in the direction of increased production and efficiency.

On the other hand, wholesale and unconsidered adoption of mere technological efficiency cannot solve our problems. This would aggravate institutional conflicts, and would destroy abruptly the social stability and moral values that cling to the pattern of general farm life. We cannot in the first place wisely pursue economic ends that interfere with the spiritual and artistic cravings of *homo sapiens*. It is as true to-day as in Biblical times that man does not live by bread alone; and the Persian philosopher who said that with two coins he would spend one for bread and one for hyacinths spoke a universal truth. In the second place, we now have an efficient

technology that we cannot fully exploit because it has developed faster than man and his institutions could adapt themselves to it. The ultimate blame for the most disturbing maladjustments and confusion of men to-day can be laid with certainty upon the haste with which a commercial age precipitated modern technology upon social institutions rooted deeply in the long agrarian past. It is a secret to no one that we cannot now employ for purposes of social welfare all the technology we already have, and the reason for it is that society is not in adjustment with that technology.

Men have already to a large extent altered their desires to a degree where they crave the goods and services that modern technology, properly functioning, can supply. City people want crisp-head lettuce the year around, and distant fruits for salads, and certified milk each morning from farms two hundred miles away. Country people want automobiles, and daily papers, and electric lights, and central-heating plants burning coal from far-off mines. But they still cling to institutions and ideas which in their present form are incompatible with the social implications of the technology needed to supply these things. Man and his institutions change constantly, but they change very slowly. The problem resolves itself therefore into a matter of finding means whereby technology and the new institutions that technology has imposed may be adjusted better to the present nature and institutions of man.

Ten years ago I believed that ultimately technology would put the individual family farm at such a disadvantage that we should be led into some sort of industrially organized agriculture. I do not believe to-day that the trend in the United States is in that direction. It has turned out that the family-sized farm is capable of great engineering efficiency, and specialized plant and animal breeding can be performed by experts and the benefits of their efficiency widely disseminated. The small rubber-tired tractor, for instance, is making almost a revolution on American farms. It is light, susceptible to mass production at low cost, and, because of its rubber tires, very flexible. This highly efficient power unit fits admirably into the engineering pattern of the family-sized farm. Its cost is not inconsistent with the income from such farms, and manufacturers are making other implements which complement it admirably. In addition to this, the improvement in roads and the almost universal use of the automobile, the national programme of rural electrification, the advent of the radio, the development of consolidated schools with buses to pick up the children have lessened considerably the so-called isolation of the farm family. These descriptive generalities

may not apply to exceptional types of farming. The big cotton plantation, specialized fruit and vegetable farms, and other types that require comparatively large amounts of labour per unit of land, may not fit into the general picture. And there may be technological developments in the future that will alter the situation greatly. On the whole, however, there is no present cause for assuming that in the U.S.A. family-type farming must be abandoned in order to attain new goals either of social welfare or economic advantage. The great advantage of this is that it avoids the aggravation of the unemployment problem in the cities, and the far-reaching adjustments in urban economic organization, that a development of industrially organized agriculture would entail.

It seems, therefore, that technology is already beginning to adapt itself to the customs and social needs of man in at least some cases. Admittedly, however, there is still a large proportion of the farm population that present adaptations and extensions of technology cannot benefit. There are millions of farm people living at a very low standard. Because their land is poor, or because they do not have enough land, or because of inaccessibility, or for lack of capital, they cannot avail themselves of all of the material advantages of an industrial civilization. Instead, their natural ability to compete is reduced by the technological advantages of others, and they suffer doubly from the social maladjustments and the psychological confusion of this age.

There should be a thorough and deliberate search for means by which technological advantages could be extended to the underprivileged farm group without bringing about an abrupt change in the social pattern. There surely must be established institutions and folk-ways that can serve new purposes. The task is to find these and to accommodate modern innovation to them. It is possible, for instance, that in America such old institutions of neighbourhood co-operation as the threshing-ring, with only a little encouragement and direction, could evolve into a farm machinery co-operative, and thus bring in technological improvement upon the social basis of familiar institutions, and among groups that lack the means otherwise to secure it. There should be more experimental projects dealing with a unified community, such as the Dartington Hall project sponsored and directed by our President and his wife, Mr. and Mrs. L. K. Elmhirst. Several of the projects of the Farm Security Administration of the U.S. Department of Agriculture are in a sense experimental, as they relate to the underprivileged, the landless tenants, and rural industrial communities.

I have a great deal of faith in the potentialities of rural industrial communities. Many factors of a purely economic nature in my country have, in certain industries, reversed the previous trend towards concentration of industry. Among these factors have been the increase in cheap transportation and the spectacularly high land values in congested areas. In the case of many industries no positive economic advantage is gained by concentration. We should take advantage of this fact. Human values, social stability, and general social welfare would be greatly advanced if industry could be so dispersed that industrial workers could live upon small tracts of land sufficient in size to permit a small orchard and garden, and perhaps a few animals and poultry. This would provide contact with nature and growing things, and avoid the obvious ills of congested urban residential areas. The proper development of rural industrial communities could be made to absorb all the unemployed urban workers and all the submarginal farm population. Rural industrial communities would tend to narrow the gulf between the farmer and the industrial worker, and should help to develop the feeling of mutual understanding and interest and common brotherhood that men in society eternally crave.

In certain countries and areas where self-sufficient or peasant-type farming is very deeply rooted, an evolution is already taking place that may indicate what its own peculiar adjustment to the new world will be. This evolution is characterized by the development of consumers' and producers' co-operatives, by measures designed to safeguard operator-ownership of small farms, and by a re-orientation of old skills and handicrafts. Over-population is probably the greatest single difficulty to be overcome in following this line of evolution. This sort of solution of the problem of adjustment has some technological disadvantages. On the other hand, it accords very well with the self-containment that the trend of modern nationalism involves. It releases agriculture from the complete dependence upon the troubled outside world to which commercial agriculture is helplessly tied. And most important of all, it absolves agriculture from abrupt social dislocations and preserves agrarian social values that fully commercialized agriculture destroys.

There are hundreds of thousands of farmers in the United States of America to-day for whom there can be no realistic hope in the near future of rising above the economic level of subsistence agriculture. It is an evident fact that many of these do not at present attain the highest standard of living that is possible with the resources at their command and under the existing circumstances and

institutions. They lack many comforts and conveniences that they would welcome and which they could procure or make for themselves if they had a little training in the old skills and handicrafts. Cultural and artistic values will be attained by encouragement of all of the rural arts, including those that do not seem to contribute to economic ends. Spiritual as well as physical needs must be considered. Relatively little effort and cost in this direction would result in a higher standard of living and in an easing of the present social tensions within this group.

Any general solution of present difficulties and any general attainment of higher standards of rural and general welfare must be sought with full awareness that this is an age of vast institutional conflicts, greater in scope perhaps than any since the sixteenth century. The *condition* of the world to-day, brought about essentially by the impact of science and technology, is one of institutional and psychological confusion.

There are everywhere in the world to-day violent conflicts between old traditions and new realities. An increased desire for novelty and experiment in some cases lives side by side with groups and institutions that are driven to bitter intolerance by the threat of rising interests and institutional innovations. Many of the old things that seemed eternal are gone; many of the old principles that seemed universal and everlasting are shattered. Mankind clings to the dearest of the old faiths and adopts the most glaring of the new realities. But the world has changed too fast, and men are sometimes confused. They cannot feel sure in their loyalties, for the world seems to them a morass of altering standards, and they grasp desperately for the most contradictory ideals. Tradition, custom, and folk-lore clash headlong with attempts at rational solutions of our problems. This is a general condition of the whole modern world, and it affects agriculture as it affects everything else. No economic or social problems can be solved if the ideological and political factors are not taken into full account.

The *political-economic trend* of the age is for governments to assume increasing responsibility for the promotion of the economic and the social welfare of their citizens. The action of groups or organizations for the attainment of social ends to an appreciable extent is replacing the action of the individual. It seems the tendency for them to begin as private or pressure groups and for their functions ultimately either to be taken over or to be regulated by the State. Whether we like it or not is beside the point; the fact remains. Furthermore, there is every indication that the present trend is

towards still greater political direction of social and economic policies. Every government has some kind of positive programme to-day for rural and agricultural betterment. These programmes relate directly both to income and to institutions. Popular demands and general circumstances indicate that these programmes will be extended in the future rather than curtailed.

As a corollary of this trend, there is a well-defined search for formulas upon which effective policies and programmes of agricultural adjustment and farm income may be developed. These formulas must tend to adjudicate or conciliate the opposed interests that might arise between agricultural and non-agricultural groups within nations.

Two other facts or trends are worth noting. There is a very definite upward push of low-income groups, both agricultural and industrial. And there appears to be a tendency to replace the former ideal of technological progress with a new ideal of economic security. These are subsidiaries of the trend towards governmental assumption of economic and social responsibility.

The present condition and the present trends involve the unavoidable implication of social planning. This is really no longer a debatable subject. It is a fact. Positive social planning with social welfare objectives is now being carried on in varying degrees in all countries, both democratic and totalitarian. I believe that social planning, even of an extensive nature, is possible within the framework of genuine democracy.

Planning in a democracy involves planning upon all the different levels of government. The policies upon which planning is based must of necessity be approved by a substantial majority of the citizens. In a democracy we still have much to learn in the way of devising new institutions and new mechanisms for making planning a product of the democratic process. There must be an extended and broadened educational system that will improve the ability of the citizenry to take part in the process of policy-making. This constitutes a challenge to all educators to teach less dogma and to cultivate greater tolerance of new ideas. It is also a specific challenge to agricultural educators to devote proportionately less attention to technical studies, and to give proportionately more attention to the social sciences and the humanities in order that the new generations of farmers may have a broader understanding of man and of society. The experiments in agricultural education now being undertaken by the University of Florida are of great significance, and deserve world-wide attention.

One of the best devices developed thus far for social planning upon a democratic basis is the old and simple expedient of providing legislators and administrators with technical advisors. The legislators and the elected administrators are responsive to the democratic will, and the experts advise on methods. When the experts come to have their technical equipment more firmly established in an integrated science of man, this combination will serve very well.

The really greatest hope for the development of effective planning and for the solution of our basic problems lies in the development of this science of man. With that development there will be scientists properly fitted to advise upon political and social procedure. Economics will both contribute to and profit from the development of the new science of man. It will take its profit in the form of a realignment of its own discipline in the light of what the other sciences can discover concerning the nature of man and of the world in which economic forces operate. It will contribute by solving technical problems which will be attacked from the point of departure of this new orientation. Economists will no longer be isolated practitioners of an isolated science, but will function as members of an integrated scientific team.

I have contrasted the two patterns of culture in which the farming of the world is carried on to-day. History is a succession of cultures, of patterns of ideas, of institutions that grow out of them, of conscious or implied goals of mankind. In the past they have evolved and changed, and they will continue to do so. The commercial pattern is young. The peasant pattern is old. From certain points of view they seem to be going in different directions and striking out on different roads.

Commercial agriculture is the product of science and agricultural technology, both in the realm of mechanics and germ plasm. It has resulted in great efficiency and great increase in the products which the farmer has to exchange in a money economy for goods and services produced somewhere else. It is a natural part of the complex commercial economy of this civilization. It is a culture the same as feudalism was a culture or any of the distinct civilizations of the past were cultures. Commercial farming of to-day is sick. It is part of a sick commercial civilization. As the years have gone by the commercial civilization has grown more and more complicated. Owing to nationalism and the prospects of war and other causes, it is ceasing to be a self-adjusting economy, and men are turning to the political state to keep its parts in adjustment.

Some of the great anthropologists of to-day have scepticism about

the increasing complexity of our culture. In the past there have been cultures which have been too complex for man to control and to operate. Is our culture heading that way? As a part of this growing complexity I think there has been an over-balance of the material side of life with a consequent loss of the cultural, aesthetic, philosophic, and religious side. It may be that this is producing an environment which is foreign to the full nature of man and that farm people are adversely affected.

The peasant culture is old. It is easier to adjust because the amount of exchange is small. The size of the holding does not permit mechanical advantage even though there may be improvement in plants and animals. Since the farm is small and the volume for exchange is relatively small, there must be many things in the growing standards of welfare which science is making that the peasant cannot have. While there was and is much in the way of security, culture, and religious life in peasant farming, it also has its illness, which is over-population. When outlets for surplus population either through migration to undeveloped countries or to city industry is cut off, then peasant agriculture begins to suffer from over-population. It therefore turns out that both commercial farming and peasant farming are in trouble, and the prospects ahead are none too good.

Science and technology are producing a new culture in the world, a new environment for mankind, for agriculture, and therefore for the farm family. This new culture will eventually be much different from commercial farming with its present trends and peasant farming with its present trends. Science and technology will give plenty of high-quality agricultural products to be exchanged, and will provide increased quantities of industrial products for rural people. Farming will be balanced with nature so that the soil resources are stabilized.

By conscious, enlightened attempts to adjust technology to man and his institutions, social and cultural values will be retained, and many serious dislocations will be avoided. The same anthropologists who questioned the present trend towards complexity think that the environment in agriculture comes the nearest to being the kind of environment which is adapted to the expression of the full nature of man. On the cultural side I hope there will be great developments in rural art, literature, religion, and philosophy.

When viewed in the light of these troubled times, farm relief measures, agricultural policies, and means of agricultural amelioration are merely symptoms that the cultural pattern of farming is slowly adjusting itself to a new world. We can be hopeful because

adjustment is taking place. The stresses and strains are being equalized little by little and year by year. It would be unfortunate if society were so rigid that it was static in its external structure and processes at a time when so much was going on below the surface. The direction and the speed of this adjustment will depend upon a number of things. Education of certain types will facilitate and make the adjustment earlier. Education of other types will make it more rigid and difficult. To go through these conscious adjustments, agriculture will have to depend not only upon the separate social sciences, but upon the whole of the science of man. It must develop its art, its cultural and religious side, and, above all, a philosophy of agriculture which is consistent with and interpretative of both the scientific and spiritual aspects of farm life.

DISCUSSION

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In compliance with the kind request of the President to speak on this subject after hearing the very interesting papers of the first two speakers, I would like to outline in brief some social implications of economic progress that concern us in Germany. I will also point to some guiding principles that are significant for the scientific and practical solution of the social problem and, therefore, merit the attention of this Conference.

What we call *economic progress* and *modern agriculture* are typical offspring of the era of liberalistic economy. No previous era had so revolutionized economic life or had led to such unprecedented liberation of technological and economic progress. Thanks to the efforts of science, technology, and economy, the development of agricultural production shows in all civilized countries an unparalleled success. In Germany, for instance, the agricultural output *per capita* of agricultural population was almost doubled in the last fifty years. And even after the War this increase continued in spite of all retarding factors and in spite of the loss of important agricultural areas by the Treaty of Versailles.

But surely nowhere was this unprecedented development without serious social implications. Above all, this era gave us deep insight into the fundamental social requirements concerned in the healthy development and persistence of a nation and taught us to assess the importance of agriculture to the nation and the State not exclusively on economic grounds. In this respect particularly the era now passing will always be a valuable lesson.

Without aiming at comprehensive treatment of the subject and without dealing in full detail with all causes, I will point to four respects in which some facts prove to us in Germany to be very clearly social implications of the economic progress of modern agriculture and, seen from the viewpoint of the whole State and nation, to be of decisive importance. Together they form a complex of social problems and relations and, at the same time, characterize the present situation of the rural population.

1. The proportion of the rural population to the whole population is continually declining. For instance, in Germany the ratio of rural to urban population has been completely reversed in the course of recent decades, and the rural population has literally become a social minority. In the struggle for existence on the part of agriculture, this phenomenon naturally represents an accentuating factor, for the increase of the urban masses, which must be fed by agriculture, undoubtedly contributes to the exercise of growing pressure in the direction of more rationalized organization of farm operations and of continual increase of soil utilization by technical means.

This evolution, with a large-scale development of the industries on the other side of the picture, nevertheless holds out a considerable menace to the social structure of the State as soon as accelerated industrialization shifts the economic centre of gravity out of the boundaries of the State and as soon as the social and vocational changes due to industrialization not only drain the normal surplus of population off the country-side, but also make inroads into the very substance of the rural population. It is too often overlooked that not only does the proportion of the agriculturally employed population decrease, but also the small rural industries and rural handicrafts decline. And thereby the source of the flow of skilled workers to the industries is undermined. If to-day we have a pronounced lack of skilled workers, it is to no small extent a consequence of the fact that we have relatively too small a peasant population. Overgreat industrialization at the expense of agriculture in the scheme of international division of labour can, it is true, be justified in theory, if there is a guarantee of permanent world peace and if it presents no menace to the social pattern. But the history of the nineteenth century has belied this theory, and the experience of the past two decades is not encouraging.

In theory the further question might well be debated: What minimum share should be granted to agriculture in our highly developed industrial-urban civilization under the assumption of continually increasing progress? There almost seems to be a biological

law according to which the share of agriculture may be the lower, the higher the general standard of living. It is particularly attractive to follow this line of thought if we are convinced that there are no limits to technological and mechanical advance. But if we fully think out this idea, we must clearly perceive that in such case the city and the whole urban development must be fundamentally re-organized and that the city must fulfil the countryside's vital functions, particularly the regeneration of the nation. I would not like to affirm that this would be permanently possible.

2. The second implication applies to the system of tenure and labour. The implications concerning the system of tenure cannot be so clearly traced to economic progress. It must be borne in mind that almost everywhere the development of the present forms of ownership has been influenced by State and legal actions, by historical factors, and physical conditions, so that here the free play of economic forces cannot be studied in the abstract. The German system of tenure is primarily the result of historical factors and is the outcome of the liberal agrarian reform of the nineteenth century.

But I think it can be perceived that, regarded purely numerically, the typical size-groups of the family farm have grown, a tendency which may be recognized in most other countries besides Germany. The most clearly apparent fact is that, in contradiction to the Marxist doctrine, the law of concentration in the sense of complete domination of the large-scale enterprise does not hold good in agriculture, and that since the nineties a decrease in the number of large farms and an increase in the medium-sized peasant farms is distinctly noticeable.

The characteristic feature of German agriculture, namely, that almost 90 per cent. is based on independent individual enterprises, has been maintained until now in the general line of development. But it must be noted that this is only true if we do not regard the debt liabilities from the middle of the nineteenth century onwards as a loss of independence and of the owner's rights of free disposal. The tenant system, so extremely prominent in the English system of tenure, has never really taken root in Germany.

But the greatest implications brought about by the economy and technology of modern agriculture lie in the field of *farming systems* and *labour systems*. Here exist all the grave problems which we witness in the dissolution of the old traditional community forms of village and homestead and in the menace to the labour system of the peasant family farm. One can only understand how deeply all this moves us in Germany if one remembers that in an old country in the heart

of Europe, wedged in on all sides, the tensions between feudal tradition and industrial revolution, between old and new forms of farm management, must assume far acuter forms than in younger civilized countries and that, therefore, social changes must be more deeply felt.

The modern farm, viewed in the light of the science of farm management, is essentially the fruit of economic considerations and requirements. Therefore its principles and criteria are rationally established. The problem of size of holdings—undoubtedly the favourite subject of scientific agrarian economic discussions—is therefore also all too often judged from a purely economic point of view, heedless of the political and social implications which, in the long run, are decisive. For surely it must make a difference to our common European-American civilization whether new land is occupied by some few great farms which do no more than supply food produced on large-scale industrial lines, or whether this land is operated as the property of many independent families and thus forms the content of a well-filled life of a healthy and socially sound stratified population. Of course, it cannot be denied in the course of the technological-rational development of our age that the large enterprise can claim a number of advantages over the small holding. But if higher national and State objectives necessitate the maintenance of a broad stratum of rural population attached to the land, we are faced with the great task of raising the smaller farms to the level of efficiency of the larger enterprises and of bringing to them the advantages of effective application of technology. I agree with Mr. Wilson that there are great possibilities of adapting technology to the specific characteristics and needs of the peasant-family farm.

The fact that, notwithstanding industrial pressure, the family type of labour system has survived in agriculture, and even shows growth in the increase of medium-sized peasant farms, is significant for the consideration of our subject. It is undoubtedly a proof of the force of social persistence lying in rural folk, and of the effect of active counter-forces.

But, from a labour point of view, does not this withdrawal into the firm position of natural and self-sufficient existence imply a closing of the door to technical progress, and does it not represent a retreat to more primitive economic systems? We in Germany at any rate cannot afford permanently to exclude technical progress from a part of our peasant farms. Because of the density of population all farms, whether large or small, must be active members of a market economy. I need only mention that in Germany we have only 68 ha.

of agricultural land per 100 inhabitants, even including the areas that will in the near future be brought into use by drainage and reclamation of waste land. We are not in the same happy position as, say, Canada with over 3,000 ha. of farmland per 100 inhabitants.

In contrast to the problems of application of technology which offer, under the assumption of satisfactory income conditions, as yet extensive possibilities, the provision of labour and the maintenance of the ties to the land are becoming ever more difficult. The difficulties commence with the peasant servants, maids and farm hands. They are greater on the larger peasant farms which hitherto were least adapted to the employment of married workers. In all size-groups the number of workers per farm has considerably dropped since pre-War times. Here there is a causative connexion between the rural exodus and rationalization of farms; in their alternating relations these two factors have alternately aggravated each other.

The problem of the rural exodus is surely at present the most urgent social problem of modern agriculture, even from an international point of view. This is not the place to discuss to what extent this phenomenon belongs to the general symptoms of capitalism. We cannot be content to view the problem as a cyclical occurrence. Here the fundamental question is whether the rural exodus, i.e. not only the abandoning of the agricultural profession but also the flight from the country-side, must in every case be deprecated. In other words, when does the rural exodus begin to be a source of change to the whole social system? That men should depart to the towns and that they should flow into urban callings is *per se* quite a normal and natural process; it is even desirable as long as the sources of rural fertility flow abundantly and as long as this transfusion of blood serves to promote healthy growth and enhanced efficiency of the social body. But it means a menace—and this is our position now in Germany—as soon as in a restricted area of food production the rural population only just suffices to maintain the nation and also begins to lose in internal biological vitality. Dr. Niehaus will refer to these matters in greater detail.

3. All these considerations inevitably lead to the problem, which is the third to which I wish to refer: National Income. It is a far too neglected fact that in almost all countries, especially in those with a high development of urban-industrial civilization, agriculture has a greater share in national *labour* than in national *income*. Here we see most clearly the distribution of power between city and country and the economic predominance of industrial and commercial activities.

In almost all countries with highly developed industries and with

a high standard of living we find a growing discrepancy between the accumulation of income and wealth in the cities and the income standards of the country-side. It almost seems as if the main lines of development lead to conditions under which those who base their existence on income often find unlimited chances of increase of income in the more comfortable urban environment, but under which the possibilities of increase of income for the rural population are vanishing more and more, in spite of more strenuous and laborious working conditions. The city is more and more the only centre of higher incomes and accumulation of capital, and therefore the source of credit, whilst it is growing ever more difficult to direct the flow of capital in a scheme of organic circulation to the centres of basic agricultural production. The shortage of capital must be considered a permanent feature of modern agriculture; the periodically recurring governmental refinancing policies which are unavoidably necessary are a drastic proof of this assertion. The effects of this shortage of capital have repeatedly accentuated the struggle for existence. The counteracting measures of rationalization, taken up again and again by agriculture, have brought temporary relief, but in the long run rather postponed than brought about a definite solution. It may even be said that in this continual struggle for a satisfactory standard of living life itself has been sacrificed, that is to say, the ever-severer struggle for existence and the consequent changes of life's ideals have contributed to weaken the biological efforts of the rural population.

If we thus ascertain social tensions in the tendencies of income conditions between town and country, we can equally well observe the severest maladjustments and injustices within agriculture. These abuses include both the discrepancies of incomes of owners and workers as well as the differences which in free marketing are due to market proximity and long distances from the markets, and also the differences arising from varying physical conditions. This last problem especially is of growing importance to nations whose food situation does not permit them to allow marginal lands to drop out of utilization. It is incompatible with our social conscience that the happy owner of most valuable loam land should earn not only land rent but also the entrepreneur's profit, whereas the peasant on marginal land only ekes out an existence in spite of all ability and thrift, and scarcely earns a return for his labour. Here the economic and the social developments show the widest divergence.

What has been said as to horizontal differentiation also applies vertically, above all in the case of the mountain peasants of the

German Alps. Just as in the plains we could observe in the post-War period a certain concentration on the better soils, here we clearly observe a retreat from the heights to lower regions. But this process signifies a shrinkage of living space and of area available for food production. For in our situation the abandoning of these marginal areas can by no means be justified by the greater productivity of the better land; and the loss of production on the one hand is not compensated by the gain on the other.

4. All this leads to my fourth point the assumed contrast between town and country.' Without entering into the historical and legal development—here again Dr. Niehaus will give fuller details—I wish to point out how town and country grew strangers to each other and were ever more drawn apart in culture and spirit. Owing to the economic preponderance of the industrial-urban development, rural folk were to a great extent won over to the urban mentality, so that its own specific life-pattern and life-values could no longer assert themselves. This social contrast between town and country, which stands out through the whole century, is ultimately one of the causes of the growth of class feeling which, originating in the cities, was a typical feature of the bourgeois industrial world.

In the course of this development the country-side was culturally and spiritually impoverished, quite apart from the fateful selective effects of which I will not speak here. The greater the influence of urban intellectualism on culture, the more was the country-side shut off from the cultural life of the nation and led an isolated life of its own. The whole system of all forms of education was ultimately determined by the city and by urban thought. Even if here and there valuable counter-forces stirred in town and country and championed the maintenance of healthy peasant culture, their brave but lone fight remained almost without any effects. Among the general public this social contrast and the extinction of all life-values of the country-side were unhappily accepted as inevitable. There was, therefore, no effective action to create a common level of life-order by emphasizing the great uniting common racial values.

If we summarize the results of this review, at the end of this era, which dawned so full of promise in the eighteenth century, we see on one hand astounding progress in production and its technical processes, but we see that paid for by the menacing social and—even more important—biological disruption of rural folk. The old unity of life and economy is destroyed. It almost seems as if the means of life overgrew the goals of life, and as if the weapons of the struggle for existence were turned against life itself.

The decline of the biological force of the rural population especially is to us a matter of gravest concern, for here we touch upon the problems of the existence of nations and the laws of their survival. This last fact particularly influenced German agricultural policy to follow the path leading to a synthesis of life and economy and to adapt technological progress to the biological and social goals. Here I would not like to speak of a compromise, as Mr. Wilson does; I consciously choose the word 'synthesis'. And we must find this synthesis. We cannot abstain from mobilizing and utilizing all productive forces to the ends of national increase of production; we cannot relinquish economic progress. Thus it is not a question of attempting to stimulate artificially a retrograde trend, 'out of nostalgia of the Golden Age', as Mr. Wilson puts it, and of retiring into a benign peasant romanticism, or of recommending misconstrued social conservatism. We fully welcome technological progress, and we wish to co-ordinate it to the living social and economic realities, so that it is no longer a menace to life but becomes an impulse to life by serving life.

These considerations, which at present force themselves on many nations, lead to the great social-political reforms and measures of economic policy which characterize the world to-day. It lies in the nature of these matters that there can be no universal solutions; that the solutions must be sought according to the actual situation of each country and by each country itself. Above all, the numerical relations between population and area are here of fundamental importance. The greater the density of population, the closer must naturally be the mutual social connexions within the population; and the more urgently the outlined social problems are felt, the greater will be the scope of State action on social policy.

As to Germany, our situation is characterized by the fact that owing to the dense population of our territory the factor of political influence gained more and more prominence; conditions could not be allowed to drift in *laissez-aller*. The best proofs are the settlement policy since the end of the eighties and Bismarck's system of social insurance. These tendencies were more emphasized after the War, due especially to the restricting clauses and consequences of the Versailles Treaty on the whole German economic system. The cession of territory not only weakened Germany's raw-material basis, but also abruptly raised the population density. All that bitter necessity dictated in the way of social measures by State action in many fields and originated out of the political situation of the moment has now been subordinated to one uniform and guiding principle

and has become an integrated part of the whole reconstruction of German life.

The starting-point and social content of this new order of life is the revival of the national community. This is the basis of the new form of life and governs the organization of the nation and its territory. If, in contrast to Tönnies—who very aptly characterized the contrast between community and society, but himself did not believe in new forms of community life—we are convinced that, in spite of progressive rationalization of our modern civilization, community is nevertheless possible, we are strengthened in our convictions by the fact that thanks to a political revival in Germany a national community has replaced a society disrupted by class strife. It is our task systematically to realize the ideal of community right through to the last circles of life and to fill economy with community philosophy and social spirit by means of effective social policy.

Politically this task demands a total planning and ordering of all domains of life. We believe that a new land order must be the starting-point and goal of such order, and this new order must stand in contrast to the liberalistic legal conception of unchecked free disposal of the land (freedom to subdivide, freedom to sell, and freedom to encumber). The German land law has therefore been fundamentally changed by the *Reichserbhofgesetz* (law of hereditary peasant farms) and several laws of utilization of areas. Our ideal is to find the best possible co-ordination of the nation, territory, and State, that is to say, a synthesis fully serving the purposes of a sound social structure.

This is our criterion for all detailed questions of agricultural policy. For instance, quite apart from all dogmatic discussions, the problem of the size of holdings interests us in so far as it is a matter of finding the optimal size-groups and soundest intermixture of size-groups from the social, biological, and economic aspects. As to the minimum size of holdings, we are concerned that the size of the farm should really give the owner the chance to benefit by economic progress and to take part in the 'give and take' of the national economy. Full regard is given to these factors in the *Reichserbhofgesetz* and the recent Reich decree concerning regrouping of strip farms, which mainly deals with the consolidation of land in the strip-farming districts and agricultural distress areas. It must be remarked that urgent social problems are to be found not only on the large estates of eastern Germany but also in the peasant holdings of the strip-farming areas; in the interests of economic progress the latter may be even more urgent than the former.

Formerly, it was characteristic of the general view of farm labour that it was considered unskilled labour. But, especially in view of the future technical equipment that will be needed if the peasant farm is to keep abreast of the general technological progress, increased and higher demands on the peasant and labourer will be made. It is not enough to give the young peasant and farm-worker a good vocational training, as has been increasingly provided thanks to the expansion of our agricultural education system in recent decades; he must have quite a new receptiveness and clear perception of what his position, his tasks, and duties in the national community imply. The growing technological character of farm labour and of the whole atmosphere of rural life calls for men who by adequate mental and bodily training have been rendered immune to the destructive influences of progress. This training of our male and female rural youth is carried out by the peasant high schools, peasant schools, and the National School for Physical Culture of the *Reichsnährstand*. Here I would also mention the useful work of the German Labour Front which likewise concerns itself with the social aspects of village life ('Strength through Joy', 'Beauty of the Village'). Mention must also be made of the National-Socialist Welfare Service.

Because of the importance of the housewife in a family labour system and in peasant economy, special attention is directed to easing the labour burden of the housewife and to her training. The Girls' Labour Service has proved a material aid to peasant households and is a valuable means of acquainting urban youth with rural labour conditions.

To-day the farm labourer receives vocational training, ending with the farm-work test, assistant's examination, and master's examination on the system already known for a long time in the handicrafts. A number of measures are being introduced and are already partly in operation in order to improve workers' housing and to regulate the economic and legal aspects of working conditions, especially with a view to strengthening the ties of the worker to the land and providing a social and economic ladder.

The question of income was decisively affected in Germany by the introduction of price control as part of the regulation of agricultural markets. The basic pre-condition was thereby provided for security of existence and for intensifying economic progress. Now, in the case of increasing supplies, the peasant need not fear a drop of prices. The inflow of goods from the world market is also regulated by control of imports and exports according to economic requirements.

Whereas in the past the fear of a divergence of costs and prices was always imminent, the present price policy is designed to prevent a discrepancy between the prices of industrial products and means of production of industrial origin on the one hand, and prices of agricultural products on the other hand.

Whereas in the past the differences in incomes and wages that were due to soil quality and to the distances and conditions of markets seemed to present an insoluble problem, to-day this question appears subject to political management (fixing of price zones, commodity quotas, transport policy, &c.). We are now just beginning to deal with these problems which all ultimately affect income conditions. Precedence was given to more urgent tasks such as elimination of unemployment, reconstruction, and reorganization of our industries in the Four Years' Plan.

The considerations of the relations between town and country have been totally revised. In the conception that town and country are equally privileged members of the whole structure of State and nation, it was necessarily a prime task to find a common level of life. But this signifies not only that the townsman must be once again made familiar with the country and that he must understand the sense and significance of rural life, but also that the peasant should realize that a common fate unites him to the townsman.

The main object was to prove to the whole nation that in these days of a high level of economic and technological efficiency the peasant section can scarcely exist by his own resources and that it cannot continually give of its substance without receiving from the nation in return a corresponding volume of transferable values as part of a sound economic circulation. For not only certain professions and trades but the whole nation benefits by the rural biological vitality and productive labour. Therefore the removal of social maladjustments in agriculture is not the concern of the industry alone, but of the whole nation. This is the sense in which we apprehend the promotion of agriculture in recent years, as a means of rightly applied increase of economic efficiency, not as preferential support of a single group.

The form and the intensity of economic progress in modern farming are primarily determined by the men striving for progress and making use of progress. That is always a matter of the frame of mind and ideals. We are aiming at a uniform mental, cultural, and spiritual renaissance. Our faith in the uniting power of the national community and the life-values of a sound organization of the people and the land directs our efforts to bringing the youth back to the

land as the external symptom of national vitality. It governs the training of all youth, ranging from the peasant's and worker's boy to the sons of the trader and civil servant. The National Labour Service, the Rural Aid, the Rural Service of the Hitler Youth and the Students' Organizations, the Rural Year, the Rural Training School of the Girls' Youth Organization are all proofs of our efforts to break down the mental and spiritual barriers between town and country and to unite them under a higher ideal of national policy.

Science also, particularly social science, has undergone changes in the course of this development. Whereas previously, being purely economic, it limited itself to establishing laws of motion of more or less mathematical and physical type, according to which progress primitively moves more or less in linear manner and economy is conceived as a mechanism with automatic steerage, modern economic science strives to understand the workings of economy from an organic biological viewpoint under the influence of human motive power. In this respect I found the statements of Mr. Wilson highly interesting and fully agree with what he said.

This new angle of approach primarily views economy as part of a great historical development, subject to the political conditions of the area in question. Absolutism and the frigid coldness of thought, abstracted from space and time, is replaced by the diversity of vital actions in time and space. This signifies an obligation on the part of science to the living realities and the extension of the radius of every discipline of science. If in Germany we call this fundamentally changed basis 'political science', it should be noted that we do not mean the infusion of politics in the service of group interests, but the co-ordination and subordination to the great goals of the nation.

Within the range of agricultural science, the effects of progress on the social structure force us to introduce, to an increasing extent, social aspects into all branches of our agricultural science and to co-ordinate these aspects to agrarian policy as the basic science of agriculture which is devoted to national interests. It is therefore with great interest that we follow the development of rural sociology in North America.

In the organization of science in Germany all this has led to new forms of co-ordination and co-operation. In the field of agricultural science the *Forschungsdienst* (Investigation Service) is the great common organization; in the wider field it is the *Reichsarbeitsgemeinschaft für Raumerforschung* (National Board for Area Utilization). Whereas the *Forschungsdienst* originated out of the voluntary

desire for co-operation on the part of all agricultural scientists and represents a new form of scientific co-operation, the *Reichsarbeitsgemeinschaft für Raumpforschung* is the great and comprehensive organization bridging the boundaries of the various faculties, in which all branches of economic science which deal with the utilization of German territory co-operate in the common task of promoting the organization of the nation and its area.

Thus I may say in conclusion that we see new forces at work in all fields of political, cultural, and economic life in Germany, all uniting in the common task of opening the path for progress and increased agricultural efficiency with a careful concern for the social needs of everyday life. This progress is indissolubly bound to the whole development of modern economy and to Western civilization. But we only regard such progress as being lasting and true when it is measured by the welfare, not of the individual, but of the whole nation, as the supreme social criterion within the nation. The free play of creative individual forces, indispensable in the interests of general activity to every civilized country, must be accompanied by a well-thought-out guidance and control of the play of forces. And if we thus understand and foster the essence of economic progress, we bow to the deep wisdom of the words written by the English cultural historian, Henry Thomas Buckle, about the middle of the last century: 'The only progress which is really effective depends not on the bounty of nature but upon the will of man.'

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It seems a little unfortunate that I should be called upon to discuss the subject which has been opened by Mr. Wilson and Dr. Booth, for I am in general agreement with the points of view of the papers. In fact, in the paper on 'Agricultural Economics as Applied Economics'¹ which I presented to the Cornell Conference in 1930 I tried to raise, and in part to supply tentative answers to, some of the questions asked in Mr. Wilson's paper.

My own clear and firmly held view has always been that the effective direction or manipulation of agricultural and rural institutions will at times require the service of all the reliable social sciences—and in particular of the studies which we call, for convenience, economic and social history, economics, political philosophy or political science, social psychology, and sociology. Under some circumstances, as in the case of work in Africa or Polynesia, we may

¹ *Proceedings of the Second International Conference of Agricultural Economists, 1930.*

need also the assistance of social anthropology, but largely because in these parts this science covers the ground which among the industrialized nations would be covered by the sciences mentioned above. We may, in fact, find both scientific fallacies and practical dangers in attempting to apply the findings of cultural or social anthropology to modern society.

It is a long remove from the simple economics of the farm-management survey and its philosophical environment, or from the simpler and cruder marketing studies, to the suggestion of the application of cultural anthropology to the solution of current problems. It is a remove which seems to me unnecessary. Agricultural economics has made great strides in recent years, both outwards in its content and upwards and downwards in its apprehension of important relationships. Rural sociology has also shown practical development, and at some points there has been useful fusion between these two sciences.

If an outsider might make a suggestion to American agricultural economists it would be to the effect that there are useful fields of study in the social economics of agriculture, and in the institutional economics of agriculture and rural life, with comparative study of institutional economics of other industries and types of environment, which should be cultivated before any special advance is made towards cultural anthropology.

There are, however, several points at which criticism of Mr. Wilson's text would appear to be useful. Like some sociologists and anthropologists he is apt to play with sentiment in unscientific and, in the long run, unpractical if not dangerous ways; and, like all pioneers, he is tempted to be more enthusiastic than the material prospects warrant. Some of the results of these weaknesses will repay examination.

We speak not objectively but subjectively when we speak simply of farming as a way of life. If we completed the phrase we would say farming is a special way of life, a specially attractive way of life, or a specially satisfactory way of life, or we might say—as many farmers and their wives have said—farming is a rotten way of life. If we were looking at farming as a way of life in any objective sense we would soon see that farming makes merely one set of the numerous ways of living. The professions have their ways of life distinct from those of farmers, foresters, fishermen, railwaymen, or coal-miners. But although there may be some degree of common form in the professional ways of life, there are also differences for doctors, lawyers, ministers of religion, and school

teachers. But no one could doubt that foresters, deep-sea fishermen, mercantile marines, railwaymen, or coal-miners have ways of life distinct from one another. Certain distributive workers also have distinct ways of life. There is always an integration of the mode of earning a living, the mode of eating, the mode of using shelter, the mode of obtaining rest, the modicum of leisure and the mode of using it, the modes of entertainment, the modes of other social relations, especially those set up in religious or educational attachments.

Farming itself shows many of these integrations—not a way of life, but many and very varied ways of living. The emotional content and the indications of realities in the phrase ‘farming is a way of life’ will vary when we say that :

Grain farming of the Great Plains is a way of life;

Cotton-growing in the Southern States is a way of life;

Cattle-ranching in the Western States is a way of life;

Corn and hog farming in the Middle West is a way of life;

Citrus-growing in California is a way of life;

Poultry farming is a way of life;

Truck farming is a way of life;

Dairy farming in New York (or Wisconsin) is a way of life;

Rice-growing in the swamps of China is a way of life;

Peasant grain-growing in the Balkans is a way of life;

Dairy farming in Denmark is a way of life;

and these are only a few of the possible cases.

If we intend to extol farming as a way of life we should fully describe the life—i.e. the work, the leisure, the earnings, the spending, and other items of the life—of the group concerned, but, when we get to this point, it will be realized that the examination and description of farming as a way of life means everything that has been covered by agricultural economics and rural sociology, and perhaps a little more.

There is a reversal of historical truth when Mr. Wilson says that we accept economic determinism and the establishment of moral values and social welfare wholly upon an economic basis, when we submit economic development to the forces of economic and technological efficiency. When mankind has consciously pursued technological and economic efficiency in the sphere of production, it has done so in order to find some escape from economic determinism, in order to find some measure of freedom in which it might develop moral values and social welfare throughout the group concerned. The escape from primitive production is an escape from

economic determinism. A return to primitive forms of production would be a return to far more intimate and effective economic determinism than we have at present.

At the bottom of p. 44 of Mr. Wilson's paper there is the suggestion that economists who set high standards of moral values and of social welfare will favour the more primitive systems of agriculture, but this is not the case, unless Mr. Wilson is thinking only of the more negative moral values and the forms of social welfare that arise from these. On the contrary, it will be those economists who wish the greatest freedom for technological progress who will set the highest standards of social welfare; these will ask for technological progress and efficiency because they see the need of greater material resources for social-welfare uses.

In his appreciation of the modern developments in the social sciences, I entirely agree with Mr. Wilson, although I am bound to remind him there is just danger of psychology, of social anthropology, and of the ideas of the value and importance of the integration of cultures being used for purely conservative ends. Indeed, one should perhaps go further and say that in the case of psychology in particular there is danger in the use of the pseudo-science for the purely class purposes of the dominant social classes. For instance, the tendency of 'intelligence tests' to show that intelligence varies with social class is doubtless a great comfort to the professional classes which design and apply them, but there is little doubt that the tendency is the result of spurious science.

There is a strong suggestion of the danger of the perversion of ideas in Mr. Wilson's proposition that the integration of cultures is so complete and institutional, and social pressures are so various and involved, that a policy of following trends of technical and economic efficiency exclusively would at least generally involve an infinite series of social maladjustments, *and probably would defeat its own ends.*

Before any such suggestion of practical principle arising from the study of cultural anthropology is accepted, it is necessary to remember that society has never followed 'the trends of technological and economic efficiency *exclusively*' (my italics), and that this has not been the main cause of social maladjustments. Indeed, the suggestion that social maladjustments have been due to class, group, and other institutional obstruction to trends of technological and economic efficiency is equally valid and fair.

In fact, the suggestion that following these trends exclusively would defeat its own ends has no justification in experience; first,

because, as already stated, they have never been followed exclusively; secondly, because a fair reading of experience in the modern period in which technological progress occurred would show a vast improvement in the condition of the people of the countries in which it occurred.

Then it seems to me there is an assumption running through Mr. Wilson's paper that technical progress and economic changes are primarily and almost solely responsible for social break-up. If one were examining the actual process of change in Great Britain and, I think, in the main in western Europe, that assumption would not be justified. Indeed, I think it would be true to say that the break-up in the mental pattern, the break-up in the ideas, came long before, almost a century before, the break-up in economic organization or even the application of the new knowledge and new forms of organization which brought about the industrial and agrarian revolutions. If we developed that statement—the development would take a long time—one could trace fairly definitely the experimentation in agriculture in the early part of the eighteenth century to the same forces as gave us a century earlier the translation of the Bible into the language of the people, the tragedies and the comedies of Shakespeare, and the massive epic poetry of Milton, and the break-up in political thought of the seventeenth century leading to the new development of scientific philosophy with Bacon, and from there one can go forward right into the agrarian revolution of the eighteenth century.

I raise this point not only for purposes of getting historical accuracy but for the purpose of reminding you that economic changes, based on changes in technical processes and methods, fundamentally rest on human curiosity and the modern development of disciplined curiosity which we call science. It is quite impossible to stop that process of applying the human mind to the industrial and the general problems with which human individuals and society are faced. There is no danger, perhaps, in Mr. Wilson's or in Dr. Booth's paper or in anything we have heard this morning of suggesting to society that it might move backwards. But in actual politics there is very considerable danger indeed in suggestions being made that the grants and the general machinery for agricultural research should be reduced because they are leading society into difficult positions. And there are many people in the commercial world who would be very glad indeed to see the arrangements for social organization and control of research reduced or even removed in order that commercial firms might choose the same

methods for their own purpose; in other words, that the powers of science might be prostituted to commercial uses far more than they are at the present moment.

Not one of our modern societies has yet moved anything like far enough away from the primitive walls of economic determinism. Let us not think for one moment of sacrificing anything that we can gain by further application of scientific knowledge in technical processes to obtain greater efficiency in agricultural production. Dr. Meyer this morning said that in Germany the rate of progress had been measured by the statement that the output per man had doubled in the last half-century, a rate of about 2 per cent. per annum, which, if I remember correctly, is the same rate of increase in efficiency as was found by Ezekiel and Tolley for the United States for the pre-War and the immediate post-War periods.

If one were taking the western commercial world over the period since 1850, the rate of progress is, as near as one can measure, almost exactly 1 per cent. per annum. In other words, it would take a hundred years to double the output per man. And yet, over the world taken as a whole we have the fact that something between four-sevenths and five-sevenths of the total population is required in agriculture to produce foodstuffs and raw materials. Under those circumstances the real problem of the world, even for the industrial commercial world, is that of finding out how we can utilize the knowledge which we already have in order to economize labour and men to raise the standard of living for the populations of those nations with which the western nations are in constant contact.

If one were taking the United States or Great Britain, the probability is that only about one-fifth or one-sixth of the population is required to produce foodstuffs and agricultural raw materials for the whole population. Even if we applied the nutritionists' standards to the feeding of the population, it is very doubtful whether we would want a very much bigger proportion if we were to organize production on the basis of using current scientific knowledge. Obviously, if we have regard not only to what we call the backward nations but to many groups of poor families in Canada, the United States, and I would even say Great Britain, we have still to find ways of applying the knowledge which we already have to technical processes and to economic organization to get us the means of providing the minimum requirements of the population, not only for physical maintenance and reproduction, but as far as is possible for the development of personality in all individuals in all classes.

Next there are the suggestions that welfare has never been defined,

and that physiologists, biochemists, psychologists, physicians, and educators can set minimum standards of human requirements. This is so up to a certain point. Every one welcomes the new sense of social responsibility which is coming to the professions which arise from the natural sciences, but people who are concerned with human welfare must look with a certain amount of suspicion on the standards which are set and on the probable effects of setting them.

What is necessary is that social organization should provide for each family the amount of purchasing power which will command the total of the various minima and then leave the family to distribute its resources. Unless this is the method, we go back fairly close to the slave system. An alternative form of this statement is that a certain degree of liberty of use of resources, certain degrees of choice, are necessary to welfare. Welfare is not achieved by the supply of certain minima of food, of clothing, of housing, of education. This is the case if only because the minimum requirements are themselves variable and the individual or the individual family is, on the whole, the best judge of the proper balance to be maintained between one set of supplies and each other set.

Another suggestion made—one which is so dangerously misleading on paper—is that society can provide a satisfactory standard of living for all its members without redistributing the incomes of the well-to-do. The essence of social superiority and inferiority does not consist of any absolute standards; it is entirely comparative. If we raise the real standards of living of the lower income groups, then by the same process we reduce the values of the present standards of the higher income groups.

In order to maintain the same differences as now exist, we have to raise real incomes for all groups when we raise them for the lower groups. The really important question for the politician will be not the adequacy of present resources and techniques to provide higher minima for the lower income groups, but their adequacy to provide for a universal increase. Unless present resources and techniques are adequate to provide for universal increases in wealth, their use for the provision of certain satisfactory minima of supplies for the lower income groups will be of the nature of redistribution of wealth—and of the nature of reduction of the comparative wealth of the well-to-do.

Every economist will realize at this point that any diversion and redistribution of productive resources for the benefit of the lower income groups is, in fact, a redistribution of wealth. At certain points it will be profitable to the well-to-do to raise the standards

of the poorer groups. (We may feed, stable, and clean the horse better in order that he may work more efficiently and produce a higher income for his master.) But when we get beyond the point at which all the supplies given to the workers go back into the economic system, when they begin to get supplies which are used for purely personal purposes, then such supplies will not only be unprofitable to the well-to-do but will be a positive disadvantage by reason of their reduction of the present difference between the poor and the well-to-do groups.

No one doubts that present economic resources of the western world, its existing and possible techniques of production of services and production, transport, &c., of goods are equal to providing for a big rise in the minimum standards of the lower income groups, and it is possible that they would prove adequate for some universal increase in wealth, but in this case the question of the importance of the comparisons between the poor and the well-to-do will arise, and it will very likely be found that the highly well-to-do will strongly resent the removal of certain differences between themselves and the poor.

It is not likely that the establishment of adequate standards of nutrition, clothing, housing, hygiene, education, and leisure for the lower income groups will occur without extensive economic, political, and social struggle. The alternative is a wide and deep development of sympathy and comprehension leading to sacrifice of some existing, and the cultivation of alternative, satisfactions amongst the well-to-do.

But, as regards the facts and the probabilities, Mr. Wilson himself rather implies that it may be difficult to avoid reduction of the comparative differences between the poor, for whom the minimum standards are to be provided, and the well-to-do, when he says that 'a great increase in general production and in the purchasing power of the lower income groups' would be necessary for the supply of the minima. Also when he says that their supply 'would involve far-reaching inner adjustments of agriculture and industry', he is, of course, saying that it would involve redistribution of demand for land, labour, and capital, and thus a redistribution of wealth, although such redistribution would not be restricted entirely to the possessions of the well-to-do, but would include 'labour' as well as 'capital'.

Another assumption seems to be that the causes of friction, perhaps one should say jolts, in the social economic world are social and not economic. It seems to me, looking as a stranger, or at least

an outsider, at the United States, that the causes of friction here are not essentially social. Indeed I think it would be true to say that if we could make such economic arrangements in Great Britain or in the United States as would take into employment all or practically all our unemployed people, if we could make such arrangements as would increase the effective purchasing power of the lower income classes even by 10 or 15 per cent., we could leave every social adjustment to take care of itself. It would certainly be true that during the nineteenth century, when the forces of economic progress were working most rapidly, although there were pains and trouble, there was never the contemporary desire, such as we find to-day, to escape back into a more primitive system. Indeed, if one is looking at temporary economic conditions in the United States, is it not seen that the chief obstacles to further progress, the chief obstacles to social adjustment, are not social resistances set up out of the conflicts of two patterns of life, but are, in fact, obstructions which are consciously opposed to progressive social forces by certain financial and industrial groups? Is that not true? If that is not true here, it certainly is true in some other countries. To try to escape, into forms of rural industry or forms of peasant farming, from the necessity of attacking the essential problem of making the economic system work, seems to be one of the worst forms of psychological and social escapisms.

I would ask Mr. Wilson to reconsider his position with reference to rural industries and subsistence farming, because it seems to me that not in Great Britain, not in Germany, not in France, not in the United States, is it possible to segregate rural and industrial urban groups in the population. It appears to me that all the dominant forces in our society, or practically all of them, are going to arise in our urban and industrial groups. They will be dominant in the press; they will be dominant on the radio; they will be dominant in their ability to set social standards of diet, of dress, of furniture, of housing; and they will be dominant in the general world of propagation and spread of ideas. Rather than think of any attempt to segregate an urban and a rural group one should think of the forces or the conditions which are necessary for the integration—the complete integration—of those two groups.

And here, perhaps, I come to the most controversial point of my statement. Mr. Wilson is looking to some disciplining, if not restriction, of the forces of technical progress for the protection of what he calls in general terms 'the family farm'. I remember the President's injunction this morning to think of that term and what it means

when we use it. But I must say that the chief characteristic of the family farm wherever it appears is this: it is the most effective institution for the exploitation of the agricultural groups which has been found by the non-agricultural and dominant groups in society since the break-up of the Feudal System. And whenever we speak of the insufficiencies of the agricultural portion of the national income, we pay tribute to the family farm as an institution for the exploitation of the agricultural community. When I say that, I am not expecting any rapid or perhaps at present any radical transformation of the general system of organizing agricultural production. But I do say this: if there is not to be worse social and economic maladjustment in our great modern societies than there has been in recent years, we have to provide forms of education, and opportunities of migration and transfer of people, perhaps both ways from agriculture to other environment and from other environment to agriculture, in order that we may build up one single society. Dr. Meyer told us this morning that that is the aim of contemporary Germany. Germany is finding some ways of attempting to build a single integrated blissful economic society. Those ways perhaps are not open to the United States, but other ways are, and I say to you, as I say to my own countrymen and myself, our job as agricultural economists, even if we are working with other social scientists, is to find the ways and means by which we can make the agricultural group, in its expectations of education, of social status, of ability to consume, and of opportunity for development of personality, equal to any other group in the whole national population.

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I fear that when I have completed my remarks some of you may think that I am more in disagreement with Secretary Wilson than I am. Many of you know that, if he and I could sit down for a couple of hours and talk his paper over, we would come to pretty general agreement on almost everything in it. However, when any of us starts writing we let shades of meaning creep into what we write that reveal our subconscious attitudes, but not our reasoned judgements. Surely some of this has crept into his manuscript. I shall undertake the unusual role of pointing out some of these in the form of a running commentary on the text of the paper.

Let us start at the point where Secretary Wilson speaks of the two 'predominant' types or patterns of agriculture, *self-sufficient* and *commercial* farming (p. 42). When I first encountered this statement, I thought these types were intended as mere concepts and not as

actualities. Yet throughout the paper one finds references to them as actually predominant. They are both spoken of later in the paper as commonly carried on to-day. For the United States, this is far from true. Dr. F. F. Elliott's careful classification of the farms in the United States in 1930 singled out only a half-million, out of our over six million farms, that he classified as self-sufficing because receipts from sales were not greater than the value of products produced and consumed by the farm family. This statement may appear to be inconsistent with the figures, quoted from Mr. Bean, about half the commercial product arising from 11 per cent. of the farms; but it is not. Mr. Bean's statement has to do with the extent of the concentration of control of agricultural resources in larger farms. The two statements are consistent with each other.

We have in the United States another half-million who earn half or more of their living from non-agricultural work off the farm. For various reasons the majority of these are more properly classified as commercial than as subsistence farmers. For one thing, they are for the most part not living in the back country, but near to industrial cities.

It does not behove me to speak for the peasant farm of Europe; but I shall be somewhat surprised if the majority of them do not produce more for the market than the value of their own produce consumed at home. I doubt if it can be truthfully said that in western Europe, or in the western world generally, self-sufficient farming is any longer dominant. Instead, commercial farming alone holds that position. The *dominant* type of farm in the United States is the middle-sized family farm. The frequency curve by size-groups shows a high concentration in the middle areas—and although there has been some lowering of the height of the curve since 1880, the shift has been mainly to the *small* rather than to the *large* side. There is not the slightest suggestion of any bi-modality. Similar curves that I have constructed for ten other countries are also without any bi-modality. But the modal farms in some of them, it is true, are pretty small.

If Secretary Wilson was looking for the basic contrast in the situation, he should have made it in terms of hand agriculture versus machine agriculture. The peasant farm of Europe and the self-sufficing farm of the United States are alike in the respect that most of the production is with hand tools or with relatively little horse labour and power. Secretary Wilson and I on one Sunday last summer visited a 'subsistence homestead' to which Appalachian families were being brought. We were told that these mountain

families probably would cultivate only so much of the arable land given them as they could plough and cultivate with one horse or mule. The dominant type of cotton and tobacco farm in our southern states is highly commercial in the sense of producing for the market, but it is also very much a hand-labour farm.

Why do we have these small hand-labour farms in the United States and elsewhere? Secretary Wilson, speaking of them as 'self-sufficing farms', says that 'such of them as still remain represent the continuing persistence of social forms that are essentially non-economic and non-technological'. Here is another place where I must differ with him. I would say that they persist very largely for the highly economic reason of a high ratio of population to the land, which makes the *per capita* product so small and wages and earnings so low that hand-labour types of farming have comparative advantage there. Secretary Wilson speaks of over-population as the 'disease' of peasant farming. I would say that it is the essence of it. They are one and the same. By definition, one could not exist without the other. If a rural population were to decline, the ratio of men to land would become lower, and less of the production would presently be by hand.¹

Middle-sized family farming also persists in a large measure because of economic reasons. The savings from substitution of mechanical power for horse and hand labour and of using large power units are more than offset on such farms by the economy of relying mainly upon family labour and combining family living with the farm business. Secretary Wilson's paper points out how new developments in smaller power units, and the extending of some of the advantages of large-scale operation through co-operation and the like, give further competitive strength to the middle-sized farms. The main economic reason for middle-sized farms, however, is the same as for small farms—a ratio of population to the land that gives comparative advantage to a type of farming that combines hand labour with machine production in varying proportions.

There are parts of the United States, especially in the Appalachian region, and similarly parts of Europe, where the high ratio of population to land gives comparative advantage to a diversified type of farming in which the majority of families live more than half from products obtained from the farm. There are more farms in

¹ Small farms also persist of course for other reasons, especially in areas with mainly larger farms, because of the low capacity of many individual farmers; in other cases because of a preference for types of production requiring hand labour, poultry, small fruit, truck, &c.

the United States, and no doubt in many parts of Europe, where a high man-land ratio is accompanied by a dominance of production for the market. As a mere matter of the arithmetic of fractions, however, the consumption by the family is likely to be a greater proportion of the total on small hand-labour farms than on larger farms.

If I were undertaking an analysis of how non-economic factors were influencing the persistence of small farms, my first move would be to turn to the study of population movements and migration to see what keeps numbers high in some places and not in others. There has been a vast amount of futile speculation in this country and elsewhere about the 'proper' degree of intensity in agriculture. You can talk about this till the cows come home and not get anywhere unless you do something about changing the ratio of population to the land; or the proportions of the population living on farms and in the city.

The title of the copy of Secretary Wilson's paper which I have (which differs from the title on the programme) is 'Economic Agriculture and the Rural and General Social Welfare'. It does not seem to me that the writer has really taken the phrase 'economic agriculture' in its literal meaning. Instead, he has discussed the possible conflicts between agricultural technology and rural social welfare. There are several statements in the paper that indicate that Secretary Wilson considers technological agriculture and economic agriculture as identical. On page 44 he states: 'To submit promptly and entirely to the forces of economic and technological efficiency is to adopt wholly a creed of economic determinism that amounts to establishing moral values and social welfare wholly upon an economic basis.' On page 48 he speaks of 'a policy of following trends of technological and economic efficiency'. There seems to be an unconscious assumption in these statements that large-scale machine production is economical, and that if agriculture does not adopt such organization it will be because of accepting non-economic values as opposed to economic values.

Back in 1932 Secretary Wilson and I were on the same programme of a conference on land utilization, he to discuss the role of large-scale production in agriculture, and I to discuss the role of the small farm in agriculture. In the present paper he refers to his former beliefs in large-scale production, but also says that he has changed his mind on the question of superiority of the large-scale farm. If he really has, why has he interpreted economic agriculture to be highly technological agriculture in the rest of the paper? It should

be apparent that different degrees of technology, so far as the use of machinery and power are concerned, are economical in different sizes of farms and in regions with differing man-land ratios.

Another phase of Secretary Wilson's discussion that stirred me was his reference to the 'scientific' determination of 'minimum standards of physical welfare'. Let me make clear at the outset that I am wholly in favour of the procedure of determining such standards, and of setting up these standards as goals, and basing programmes of action upon these goals. In my judgement we shall make much more progress on the basis of such goals and programmes than without them—even progress in some directions that later events prove to be 'best', although our goals are wrong some of the time.

But surely he has overstated the scientific nature of these standards. The third of the three diets outlined by Dr. Stiebeling has a large element of luxury foods in it. Diets equally adequate, and equally satisfactory to those consuming them, but costing considerably less in terms of exchange value, can be found widely in use in scores of places in Europe and the British Empire. The possible range in adequate housing is very wide. Is a bathtub a minimum essential? In the part of rural America where I was reared virtually no farm-houses had bathtubs. Moreover, in four families in five the weekly bath was not then an established institution. A change of clothes once a week supplied the total of this form of sanitation. Was this 'adequate'? I am inclined to think it was, until one begins to include the aesthetic in his minimum standards. Mr. Tugwell and the Resettlement Administration surely thought otherwise in 1935. There was a similar difference of opinion about indoor toilets. Is central heating of houses essential to adequacy? Another generation may so decide. How about artificial sunlight, especially in England? Air conditioning in the United States? My limited experience in European homes would lead me to think that satisfactory living is obtained much less expensively in them than in the United States. For one thing, the recreation and social life is more home-made and less commercial. How much and what kind of education is adequate for a farm boy? Surely the scientists of the different countries of the world answer this question very differently.

Those with a continental background will be familiar with a dichotomy of economists and other social scientists into two groups: one group, commonly described as 'pure' scientists, concerning itself only with explaining existing phenomena, or the order and magnitude of change in the past, which considers its task

accomplished when it has discovered the relationships constituting such explanation; the other group concerning itself with developing relationships which furnish a basis for programmes of action, and which commonly goes so far as to indicate the action that needs to be taken. This group of 'purposive' scientists is often criticized by the first. Its exponents are often called 'reformers'.

These scientists, of whom Secretary Wilson speaks, who have been setting up minimum standards belong to the second of these groups. It is to be doubted if any unusual progress has been made recently in the understanding of diets, housing, and the other components of living. What has happened instead is that the purposive scientists have come to the fore again in the period since the World War, as they did in the days of Karl Marx. America's foremost purposive economist was Henry George. To-day we have the modern Marxists of Russia; those who in Germany and Italy are writing a new social science for Nazi-ism and Fascism. In the United States we have our Tugwells, Ezekiels, and Gardiner Meanses. Once in a generation a purposive scientist becomes a great world figure. A thousand others merely write and rant.

It is characteristic of such scientists that they have goals. They have somewhere they want to go—consciously or unconsciously. In these days of planning it is the vogue to set down in definite terms the limits of their objectives. These are our goals or standards. How scientific are they? If the goals are accepted as given, so that the problem becomes one only of means to the end, analysis of relationships between variables can be made that point as surely to the result that will follow from a given course of future action, as the pure scientists can point to the relationship out of which they build their abstract sciences. In practice, however, the purposive scientists are very likely to confuse analysis of ends with analysis of means to ends, or at least to *accept certain ends as scientific desiderata* which in fact have merely been assumed.

The points at issue come to a head in two sentences of Secretary Wilson's on page 47: 'It is reasonable to expect that within this generation the new science of man will be able to describe certain desirable cultural goals with realistic precision. When it does, social or economic planning can be established on a scientific basis.' Any cultural goals which this generation sets up will surely reflect the prevailing philosophy of those who propose them. Nazi Germany is busy setting up a set of cultural goals significantly different from those of the days of the Weimar Republic. The Russia of Stalin has different goals from that of Lenin. President Roosevelt

is struggling to impose some new goals upon the people of my own country.

Indeed, such goals can be *described* with scientific accuracy. But Secretary Wilson surely implies that they have *scientific validity* also. But their validity is only relative to the goals taken or assumed. That these goals are of the particular day and the particular country could not possibly be expressed any more clearly than in the first of the four principles that Secretary Wilson propounds immediately following the foregoing sentences: 'Orthodoxies of all sorts tend to be rationalizations after the fact.'

Again I wish to state, so that there will be no chance of misunderstanding, that I am in favour of setting up goals or standards and basing programmes of action upon them. But we should understand clearly what we are doing and not pretend to a degree of scientific finality that does not exist. We shall then not have the sinking of the heart and the moral let-down that come when the peoples of our countries cast us out and accept another political and social philosophy. If we could only have this understanding, there would not be so many disappointed social reformers writing pathetic autobiographies like that of Lincoln Steffens.

I am reminded in this connexion that in the height of its glory in North Dakota the Non-partisan League published its annual quota of new laws in a little booklet bound in red covers under the title *The New Day in North Dakota*; also of how President Howard of the American Farm Bureau Federation opened his remarks before a gathering of grain-growers at Chicago, called for the purpose of considering a plan of co-operative marketing suggested by Mr. Aaron Sapiro, with the oracular utterance, 'This day marks sun-up for American agriculture.'

Most of us will agree with Secretary Wilson that the introduction of machine methods and modern technology in agricultural production, and with it an increasing degree of commercial production, has created a conflict with old ways of thinking among farm people characteristic of the days when agricultural production was more for use on the farm and less for the market. We will remember how significantly Thorstein Veblen discussed the influence of these new forms of production and marketing upon agriculture as well as industry in his highly significant book *The Theory of Business Enterprise*. No doubt some of the difficulties which the present Agricultural Administration and its predecessor, the Federal Farm Board, have experienced in getting their programmes of production and marketing control accepted by the farm population trace back to

a strong residue of attitudes based upon earlier and less commercial forms of agriculture. Farm people are not sufficiently capitalistic in their thinking to function effectively in a capitalistic society of the sort that such societies have now become. The transition called for is not merely to capitalism as it was described by the classical economists of the last generation, but to the types of capitalistic functioning which we now describe under such names as 'monopolistic competition' and 'imperfect competition'.

Mr. Elmhirst has also dwelt upon this conflict in his opening remarks. I take no exception whatever to any of his statements (except that I wonder if he recognizes that economics also is a social science—a science of human beings living in groups and societies—and if so, what the 'social' in economics as a social science means to him). I would point out, however, that surely the difficulties which a modern capitalistic society encounters in keeping the process of production in operation and moving steadily forward with increasing efficiency and increasing *per capita* consumption are due more to conflicts in the minds of industrial folks than in the minds of agricultural folks. If we could resolve the conflicts in the industrial, financial, and business parts of our society, those in the agricultural part of it would prove to be no great obstacles to progress. Mr. Elmhirst expects to see the generalizations derived from social anthropology studies of primitives applied successfully to the resolution of our present conflicts. It will be very difficult to translate them into terms of modern urban conditions where help is most needed. The method of analogy is very treacherous at the best. Nor have the recent writings of the best cultural anthropologists done much to increase our confidence in them. One would expect that a study of primitives ought to help us to understand modern war if anything modern. But the great Malinowski's attempt at it at the Harvard Tercentenary was surely not encouraging.

I fear that I shall also have to part company somewhat with Secretary Wilson as to the difficulties involved in the absorption of technology by agriculture. It has already been pointed out that the dominant type of farm in the United States, and a large part of western Europe, is neither a self-sufficing farm nor a strictly commercial farm, but one in which an increasing amount of machine production and an increasing application of scientific methods is combined with an improving quality of living by the farm family on the farm. Secretary Wilson makes clear that farm families are adopting the contributions of technology to their living as well as to their production operations. This absorption is surely going to

continue. As it takes place, the attitudes of the farm people will change. No doubt there will be a lag in it in the future, as there has been in the past; but, unless our agricultural leaders become too anxious to bring the millennium within a few years, it can well take place with no more lag than can be allowed for successfully in plans for agricultural improvement. There is much to indicate that the lag will diminish rather than increase.

This leads me to comment on another point lightly touched upon by Secretary Wilson. I quote a sentence: 'On the cultural side, I hope there will be great developments in rural art, literature, religion, and philosophy.' The rural art and literature of the future will be the joint product of farm people living in the country, of industrial people living in the country, and of city people spending more and more of their time in the country. The Country Life Association of America was founded on the principle that life on the farm in the country has certain values and properties which are peculiar to it and which must be preserved. That principle is decaying. Farm people are constantly absorbing an increasing amount of what was formerly called urban culture, and city people, as a result of modern improvements in transportation and the like, are absorbing so much of the country that the two cultures are in rapid process of being largely merged. We shall still have a rural art, but it will be an art of rural landscapes and rural living more than of agricultural occupations.

This does not mean that farm people will espouse the 'high cultures' of our most sophisticated urban civilization. The great bulk of our population, both urban and rural, does not have the intellectual power or imagination to derive pleasure from and contribute to grand opera and other forms of high culture. For the bulk of the people, farm and city alike, there will always be need for a simple proletarian type of culture. As time advances, it will differ less and less as between the farm proletariat and the industrial proletariat. A major cultural need of to-day is to develop means of creating this kind of an art among simple-minded folks themselves, rather than have it provided for them by a venal moving-picture industry, broadcasting, and a comic strip. The attempts at developing community forms of recreation and expression that are exemplified by Mr. Elmhirst's Dartington Hall efforts point the direction in which such cultural development may well take place. The less we think of these as peculiarly agricultural community enterprises, or even peculiarly rural, the more successful will our efforts be.

Secretary Wilson speaks of rural industrial communities and his

faith in them. I do not need to rely on faith in talking about such communities. In a survey which we have been recently making in southern New England, we find that half of the families we thought were those of farmers are rural-industrial families, families living in the farming country on a piece of land that once was a farm, still doing a little farming, but mainly earning their living in a city. Half the townships in Worcester county, Massachusetts, are rural industrial communities. And they are very happy communities. They have developed so fast that our social processes and controls and services have not kept up with them. We do not need to create any more in New England; instead, we must solve the problems of the ones that we have. In the country as a whole, such communities are developing rapidly. Government can help more by helping these than by creating new ones.

Secretary Wilson also speaks of a new trend towards economic security. This trend is best stated in terms of something more fundamental than the current catchword 'security', in terms of a drift towards *not accepting the income and welfare that comes to different social groups in a freely competitive society as a satisfactory measure of proper distribution between them*. Back in the days when a former colleague of mine, Professor T. N. Carver, wrote his *Essays on Social Justice*, it was commonly accepted that what came to an individual in the competitive process, regardless of his inefficiency or very high efficiency, is social justice; and that he has no right to ask for any more, or receive any less. Although this basis of distribution of income may have been an excellent social expedient in certain periods of our development, it no longer is. We know that under such a system all sorts of young people, reared in all sorts of environment, lack opportunity to be as useful to society as they might. We know that other people are so placed that they have large incomes which they are not able to use advantageously to society or even to themselves. As a matter of fact, we long ago began to forsake such a theory of social justice. An outstanding early example of it was free public education. Later we adopted progressive income taxes and inheritance taxes. Our recent social security legislation is the latest large move in this direction. Our rural rehabilitation efforts are in the same class. We will continue in this direction.

The practical questions are how far to go with it at any time, what lines to follow, and what social values to augment. These questions have a definite relation to the old question of the balance between rural and urban living, and the distribution of our population between city and country. If any of you think we are distributed

as we are because of a free play of competitive forces, you do not belong to my school of economic thinking. There are many more people making their living in the city to-day than would be the case if the competitive system operated according to classical theory. But, assuming that we had such a system, should we have a satisfactory working out of social welfare? Surely not.

At the St. Andrews Conference, when the position of agriculture in society came up for discussion, some present took the stand that unless agriculture can prosper in competition in the markets for labour and capital and other resources, and in the markets where its products are sold, it will have to decline, if farm people are not to become 'mere pensioners of industry'. This stand is indefensible on two fronts: first, the competition in question is very far from free competition, and many more people are supported in cities than would be the case if competition were really free; and second, even if it was, we may need to redistribute social income between country and city in terms of social need rather than of current economic contribution to production. If the paper we are discussing had chosen to analyse the relation of 'economic agriculture' to 'rural and social general welfare' in terms of the balance between rural and urban, hackneyed as this topic is, rather than in terms of the balance between self-sufficing and commercial production, it would have come to closer grips with present realities.

Secretary Wilson conceives of several of the departures emphasized in his paper as constituting a 'new science of man'. Mr. Elmhirst has been largely content in his introduction merely to call upon the various groups of social scientists to 'look over the fence' and see what the other groups are doing. This second approach would seem to be the more in keeping with the situation. It is doubtful if any *new* science of man is now developing. All the science mankind has ever had has been the science of man. The science of man began as philosophy and to-day is nothing more than that philosophy, except that it has been differentiated into many compartments and specializations. The whole science of man is so complex that one individual scientist has more than he can do to encompass even one compartment of it. But the whole group of scientists, beginning with the mathematicians and physicists and ending with the super-social scientists and the philosophers, are still engaged in exploiting the one great science of man. Absolutely nothing new in the way of *scope* has been introduced into this science in the last few decades by the cultural anthropologists or by any other group. It is true, however, that the anthropologists have been

making their science more *social* just as have been the geographers and psychologists.

The other thing that has happened, and this particularly in the United States where it was most needed, is that recently certain groups of scientists, social scientists especially, have become conscious of a certain lack of larger perspective in much of what they are doing, and of a lack of team-work among the different branches of social science, and an attempt has been made to bring about a better co-ordination of their efforts. This attempt has mainly taken the form in America of our so-called Social Science Research Council. The groups of social scientists who have principally taken the lead in this movement are: the geographers, many of whom now proudly call themselves *social* or *human* geographers; the historians, who now increasingly look upon themselves as over-all social scientists; and the cultural anthropologists. The economists have been included in this movement, but more with the thought that they needed to be disciplined than that they had anything to contribute. For the most part, they have been under attack from the other groups. These other groups no doubt have been unconsciously animated by their realization that the economists are more nearly able to make their way alone in the world than they are, because the science is upon a more definite basis.

One would naturally assume that the sociologists would be dominant in such a movement. But for the most part they have been pushed to one side. They have been trying to play the role of general co-ordinators for a long time—since Spencer and Comte, and even before—and either have not been too successful at it, or their pretensions along this line have irked the historians and other social scientists. So, around about 1925, the social scientists in the United States started out to have a 'New Deal', led mainly by the three groups mentioned. The economists especially were treated as the conservatives and as 'economic royalists'.

This movement has helped considerably, although it has fallen far short of realizing the hopes of its leaders. More integrating of natural science with social science, and of the social sciences, and of all with philosophy, is now being done. But the problem has not been encompassed as yet. The largest success has been achieved in comprehensive research projects in which several groups of social scientists have collaborated. There are several such in the United States for every one that Mr. Elmhirst can name for England.

This development does not mean, as was implied in some of the discussion of or in Professor Ashby's stimulating paper, 'Agricultural

Economics as Applied Economics', at an earlier Conference, that we are to step out of our accustomed roles as mere economists and include political science, sociology, ethics, and even philosophy in our systems of evaluation. You may remember that I then raised the question as to whether economists alone are competent to analyse the final issues that confront mankind, and suggested that economists confine themselves to the economic valuation process and to choosing between economic alternatives, leaving to some other kinds of scientists or scholars farther up on the scale of co-ordination the task of weighing economic against other values, such as political, social, ethical, aesthetic, religious, and the like.

Some of what Secretary Wilson has said suggests that the *cultural anthropologists* do this co-ordinating. A few cultural anthropologists may know more about more of the sciences that need to be co-ordinated than do economists generally. But surely not many of them. A great geneticist in the United States wrote a book upon the problems of human civilization—and they turned out in his way of thinking to be mostly genetic in their origin and solution. Similarly, a great natural scientist not long ago proposed to solve the problems of education by having every child brought up in a laboratory. The cultural anthropologists have thus far performed mostly according to a similar pattern. If any group of scholars is qualified to do the final evaluating, it should be the philosophers. I marvel greatly that Secretary Wilson does not so proclaim. Or has he become so enamoured of a new love, this cultural anthropology, that he has forsaken his once-beloved philosophy? But even they alone cannot be trusted.

In the field of agriculture, Secretary Wilson has been a powerful factor in progress in this direction in the so-called 'schools of philosophy' that he has worked out with Dr. Tauesch, and in the course of lectures and seminars on 'Democracy and Government' that he organized in the Department of Agriculture last winter. But the outstanding thing about these efforts of Secretary Wilson's is that all the different social scientists and the philosophers have been brought together in it on a team-work basis. In his programme, the science of man is being handled not by any one group of scientists but by all kinds of scientists. And so in my judgement it must always be.

What is the meaning of this for us agricultural economists? When Secretary Wallace took over his tremendous task in 1933, one of his first remarks to me was that, in spite of his many disparaging remarks about them, he was going to have to use a lot of economists.

In the 'New Deal' organization for agriculture he has set up they are almost as numerous as the lawyers, which is saying much. The Social Science Research Council has had to lean heavily upon economists in order to realize what little it has achieved. The first large research project it set up was envisioned by the geographers, and laid out by them and the historians. That was the so-called Pioneer Belts project, which finally became localized largely in Canada. Not one real economist was a member of the committee that framed the project. The committee set up at the University of Minnesota to formulate an Old North-west 'culture area' project had not a single economist upon it. Yet when these projects finally eventuated in some actual research, more economists were called in to help than any other scientists.

This experience makes it clear that the economists have a large role to play in the complete science of man, a powerful contribution to make to the final integration. Economics itself is dominantly a co-ordinating science, but upon a level intermediate between biology and philosophy.

In the final evaluations that are made whenever a society or a nation or an individual lays out, or drifts into, a programme of action, the conscious or unconscious weighing of economic factors, and the use of the economist's methods and tools of analysis, figure in a large way. But of course they are seldom final, no matter how broadly the term economics is defined. On the other hand, the economist has not finished his part when he has made his economic choices. He has to stand by and see what the other social scientists, especially those farther up on the scale of co-ordination, do with his economic evaluations, whether they misinterpret or misuse them. He has to keep watch on the essentially economic evaluations that are constantly being made by other social scientists to see that they meet his tests—especially those made by sociologists and political scientists. He surely needs to watch the philosophers.

So it is with each of the other social scientists. All working together in this way—and likewise the natural scientists—the whole science of man goes forward.

C. A. DAWSON, *Department of Sociology, McGill University, Canada.*

Dr. Booth's paper was a thoughtful and careful summary of the emergence of a social self-consciousness with respect to the agricultural industry. Modern technical advance and specialization with respect to a world market have given rise to problems that have stimulated this self-consciousness and have led to the develop-

ment of a special group of scientists, both inside and outside national and local governments, who are dealing with these problems from the point of view both of research and administration. One of the central points in the paper by Dr. Booth emphasizes the shift from the individual to the group point of view with respect to research and legislation arising out of it. This is perhaps part of the natural life cycle of all our economic groups. Organizations, legal and otherwise, emerge which in time relate the group in status, function, and formal control to other producing groups within the nation, but on an autonomous basis.

In keeping with this is the rising status of the farmer and his family and the farming class to which he belongs. This involves him in reciprocal relations with other groups, and *pari passu* an extension of outside values and outside control to the affairs of the agricultural group. The divisions of labour between, and more extensive relationships with, other classes inevitably mean the extension of social controls with a more public significance.

Dr. Booth did not emphasize organization for farmers by and through leaders of the farm group, although technical agricultural experts are supposed to have a close sympathy with the interests of the farm group. Agriculture, as the paper by Mr. Wilson so well insists, is a culture. It is a way of life. It has its own rationalizations of life, its own set of values, its own philosophy as have other producing groups.

Perhaps there was in Mr. Wilson's paper in particular the attitude that food experts, educators, and perhaps philanthropists from other groups know what is good for the farmer. No doubt in many matters they do, but there are a great many matters in which they do not.

In the long run the agricultural group must pay its own way, under our system at least. We cannot include producing groups among our luxuries, although we come close to that at times for certain of our economic groups. The farm group, too, must pay its way in terms of organization of its own affairs, its institutions, and its mental life. Technical advisers and research men will put their storehouse of knowledge at the disposal of the farm group, to be applied as the latter can and will to meet its own exigencies. This organization of the life and interest of the farm group in the organic sense is a tentative experiment, and very much a natural growth. Only in a limited sense is it susceptible to wholesale planning. Corporate planning, apart from certain regulations which act as a formal protection for this group and the larger public in which it is set, must

be very tentative and flexible on this continent at least. This applies equally to other producing units. Each must find its place and function, drawing as it may on the organized knowledge concerning man and things. Life in any group is too sensitive an affair to be planned in meticulous detail. Let us then be modest in our planning, and careful to utilize and facilitate natural processes whenever and wherever planning for any group is concerned.

Referring to the social sciences, may I insist quietly that men will do their best, as economists of the various types, anthropologists, sociologists, and psychologists, if each sticks to his own particular speciality? The unity of knowledge will accrue inevitably with just a bit of facilitation. When the scientists have done their best for the farm and other groups, there will be still wider areas of life in which the aims of people, what they seek, what they make sacrifices to get, will be defined much more in relation to fashion and art, than the precise findings of the scientists. In his contacts with scientists, representatives of other groups, urban and non-farm, and through the newer devices of communication, the farm group may be expected to formulate the goals of its own existence, in relation to other producing groups to be sure, but as a relatively autonomous functioning economic and social unit. There needs to be a much more systematic and naturalistic understanding of ways of life than now exists, and the direction in which they tend to change, if we are to extend planning on a wider front and outside of times of national emergency. Both authors, I am sure, are fully aware of this aspect of the planning problem. These stimulating and challenging papers form the basis for, I am sure, much further discussion. In this they achieve admirably their intended function in this initial session.

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There appears to be general agreement that it is the task of the future to co-ordinate better than hitherto economic, technological, and social progress, both by the education of men and the improvement of the old institutions. There furthermore appears to be general agreement that we should have permanent institutions which are charged with these functions, and that they should be either managed or at least controlled by the State. But if this is the prevailing opinion, agricultural economists have not only become sociologists but adherents of a very marked sociological school which developed side by side with liberal and Marxist sociology in the nineteenth century, especially in Germany; the basic principle

of this school of thought was termed by Adolf Wagner 'the law of growing activities of the state'.

If we make the whole social body the object of our planning, our knowledge of the nature of this body can never be too thorough. Otherwise there is always the danger that in trying to eliminate earlier maladjustments, we cause new maladjustments, so that the trend of our work is not determined by our ideals but by the unforeseen results of our mistakes. We know far too little about the special form of the connexions between institutions and conceptions in the many paths of life.

The art of handling men as a means of social and economic planning is as yet in its initial stages. It is not enough to have read Le Bon's *Psychologie des Foules*. The most important components of the social order are not the masses but the groups: family, village, profession, party, church, army, nation. Within these groups is enacted the real life of the people, and here they are wiser, better fitted to form opinions, and more independent than when, gathered together in great masses, they listen to an orator, watch a football match, or take part in some celebration. The peasant particularly is not much of a mass man; for he stands in the centre of a microcosm, and that makes for a level head. To-day urban mass alternates between extreme individualism and extreme disregard of individuality. The peasant is better directed to a sane middle path—with a will of his own, but swayed by the traditions of the group in which he lives.

To McDougall belongs the merit of having clearly shown the deciding importance of group sentiments. The relations of institutions to group sentiments explain to us a number of social implications of economic progress in agriculture. If, for instance, we compare the distribution of land, which has scarcely changed in many countries for a hundred years, with the enormous redistributions of wealth in the cities, the effects of the commercial era on the land seem very insignificant. But it was not the trend towards the large-scale enterprise that linked farming to industrial capitalism; the deciding factor was the change of sentiment of the peasant for his homestead, his family, and his village. These sentiments were more deeply changed in the milieu of industrialized areas than in remote mountain districts; race, religious ties, and other factors also played a part. The range of the capitalistic milieu reached the point where the bourgeois was chosen as the ideal of the new type of successful man.

Professor Meyer has given you an outline of the social and

economic alterations of rural life in Germany due to urban influence, and has shown what future tasks arise out of this situation. I will supplement his paper by describing in some detail which problems of social and economic nature have been created by the commercialization of farming in the most important social unit, the family.

The family is the basis of all social life. Its numerical strength and the quality of its members determine the vitality of the social groups and of the nation. In a family with numerous children the tending instincts of the parents and the community of the children bring forth the worthiest sentiments: devotion, discipline, sense of justice, and the willingness to follow ideals. These are the virtues without which no social community can endure. The farm is the place where the peasant must prove his worth, not only as manager of his business but also as leader of men. The assistants of the peasant, his farm hands and servants, usually feel more at home where there is not a single spoilt son, who lords it with or often against his father, but where several children of the peasant work on the farm and submit, as a matter of course, to an authority that is sparingly exercised. In rural communities with a low birth-rate social life shrinks, and all social institutions of education and of mutual aid are endangered. And amongst youth the healthy spirit of competition at work and at play is lacking. A numerous family is therefore not only the source of the biological vitality of a nation; it is also the most important basis of social life in the community, in political and vocational organizations, in the army, and in the nation. But this important basis is no longer strong enough in some regions.

Taking the data of the German census of 1935, I have compared the marriages of independent farmers and peasants up to 1913 with those formed from 1913 to 1923. At the time of the census but few further births could be expected in this group. The following figures show the decline of births in post-War marriages:

0-2 children in	26.1 per cent. of pre-war marriages.
„	46.6 per cent. of post-war marriages.
3-4 children in	27.4 per cent. of pre-war marriages.
„	32.8 per cent. of post-war marriages.
5 and more children in	46.5 per cent. of pre-war marriages.
„	20.6 per cent. of post-war marriages.

The lowest figures are lower than the figures for any population group in towns with less than 100,000 inhabitants, and approach the minimum figures of the biggest cities. In these districts birth

restriction was commenced long before the War. In the pre-War generation here there were fewer marriages with four or more children than in many other parts of Germany in the post-War period. These regions with few children form a connected area on the most fertile Loess soils of Germany, with a splendid transport and market location. Here was the cradle of intensive agriculture in Germany, and here the farm was first transformed into a capitalistic enterprise on the basis of sugar-beet cultivation with modern technology and with keen profit calculations. In this milieu, where the conception of life is narrowed down to economic aspects, the peasant family broke down. The peasant adapted his pattern of life to that of the successful bourgeoisie of the neighbouring industrial cities, but his enterprise was not capable of such expansion as that of the city man in the second half of the nineteenth century. It frequently occurred in city families that the incomes of the sons were many times higher than their fathers'. Although in fact the incomes of the peasants increased, there was a disparity to the disadvantage of the latter. This could be remedied by birth restriction.

The following factor acts in the same direction. In such districts the settled families are drawn into the capitalistic milieu through intermarriage and commercial relations with the urban bourgeoisie, and now at each inheritance the land is appraised at a higher value and is unproductively encumbered. And so we often find the highest debts in the most fertile areas, and thus the opportunity of the children who remain on the land and take over the farm is ever more cramped.

The *Reichserbhofgesetz*, which prohibits that in settlement of legacies the land should be accounted as capital and that payments therefrom should be made to the heirs, has cut the institutional connexions between land property and capitalism. But if an increase of children shall be the result, a change of sentiments must also take place. In Germany we have abolished the class-strife of Marxism, but we still face the heavy task of overcoming the all too materialistic conception of utilitarianism as an ideal of happiness.

In many parts of Germany the old family sentiment is still alive. The heritages were smaller, but, as is proved by the careers of many children leaving the farms, the moral training for life that they received in the clear and simple order of the peasant farm was an excellent gift. In these parts the commercial era had a contrary effect on the family. The enormous expansion of opportunity, thanks to the introduction of technology and of rationally organized enterprises, gave the surplus rural population the possibility of finding a living in the cities. The birth-rate was maintained, whilst

infant mortality rapidly declined. The result was that until the War more children grew up on Germany's peasant farms than ever before.

In a recently investigated rural community of Nether Saxony, the nucleus of which is formed by 88 medium peasant farms of about 20 hectares, in the 110 years from 1696 to 1805 births exceeded deaths by 1,524, but in the 110 years from 1806 to 1915 the surplus was 3,500. In this community the economic chances in life of the peasant child could only be maintained at the same level if the returns of farming were trebled. The opportunities may have been extended about on this scale in the second half of the nineteenth century. But already before the War there was a certain crowding of population on the farms; the population density reached 100 per square kilometre, a very high figure for a purely rural community. The stationary, partly even declining, income of the farm population after the War necessarily caused birth restriction; otherwise the social and economic structure of the rural community must have broken down. Whereas in the third-but-last generation there were 7.2 births per marriage, there are now only slightly over 4.

To me the outcome of this brief review seems to be that wherever, owing to the economic and spiritual ties of a capitalistic order of society, the one- and two-child system has spread, the next aim should be the attainment of families with three or four children. German legislation to-day favours large rural families by a reduction in direct taxation. The significance of this preferential treatment lies less in the improvement of income, for the standard of living still remains considerably lower in the larger family, than in the emphasis placed on the fact that a large family is an essential social honour. In the education of the young generation to these ideals the large families form examples of physical vitality and metaphysical unity. The opinions as to standards of living and everything connected with them are in all human society based on convention. In our modern bourgeois society these standards were determined by the small families in every social section. If we succeed in raising the number of children in these families, we improve a most important relationship of social life to the advantage of the larger families and remove a powerful incentive for small families. We trust that the rise in the birth-rate in Germany in 1933, which shows an increase of a third and fourth child, is a promising step in this direction.

Where the sentiments are still alive in the families, they must be carefully fostered. It is more difficult to reawaken them. For this we need a number of exemplary men in every village. The peasant sentiments of the family are still powerfully influenced by the com-

munal life of the village. Family and village mutually support one another, and both fall if one gives way. It is true that to-day we have a lack of peasants who are not only honourable men and good managers, but who also have the will and the gifts to care for the welfare of the whole village and to be leaders to the others. The situation was different a few generations ago. Here again we meet with an effect of the commercial development. The social anthropologists consider that the talents of the rural families have been lessened by migration to the cities, and that the hereditary qualities have been essentially weakened. That may have had the result that many families, which were formerly of high quality, have dropped to an average level. But it is not universal. The process of eliminative selection has, for instance, been checked wherever, according to a fixed order of inheritance, the farms pass to the eldest or youngest son. Even to-day there is a group of more than normally talented people in every rural social section.

Why are they so rarely prominent? I think the answer is simple. The spread of commercialized farming made far more claims on the attention and time of the peasant. He withdrew from village life into his farm, for here were the new opportunities for enterprising men. To be the advisor and arbitrator in communal affairs, and to watch with authority over the morale of the village, was now less of a social honour than formerly. Our language has registered this change wonderfully well. Formerly, people spoke of the 'first' peasant of the village; that implied character and ideals. Later, one spoke of the 'richest' or 'fattest'; that smacks of money and envy. Thus the *élite*, and the willingness to follow their leadership, are disappearing, less owing to the decline of hereditary qualities than to the disappearance of old group sentiments in the village. By means of education we hope to create the essential basis for a new social order of the village.

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Secretary Wilson in his paper has done an excellent job of summarizing current thinking in Washington on the social phases of the agricultural problem in the United States. National planning for agriculture, according to Secretary Wilson, is a reality and a permanent feature in agricultural organization. National planning represents the most important step taken in effecting economic progress in our generation. It will become the vehicle, according to Mr. Wilson, through which economic change will find its application in modifying economic and social life in American agriculture.

For some of us whose contacts with farming are more direct and intimate, national planning for agriculture has a somewhat different aspect. We recognize that our view may be restricted because of the provincial nature of our environment. When, however, we study at first hand in our own communities the effects of the various programmes, we are forced to the conclusion that national planning for agriculture in the United States has not reached much beyond the stage of planning for plans. A foreign student of American agriculture might easily receive a wrong conception of economic and social change in American agriculture by studying agricultural legislation and current writings and analyses of economists and others engaged in the various programmes of the Federal Government. An agricultural economist who aligns himself with a government action programme, business, or any other 'cause', loses his amateur standing, and his writings should be accepted with this in mind.

If I had been faced with Secretary Wilson's problem in preparing this paper I would most likely have approached it by attempting to show American commercial agriculture in the midst of three great groups of economic change: (1) rapid technical progress, (2) world and national economic disorganization as an aftermath of the War, and (3) the rise of organized labour which has curtailed the outlet for surplus farm population. It would have shown that economic planning as revealed by developments in most countries is not planning for an expedition into areas of greater agricultural development but at best only a planned retreat from commercial farming towards great self-sufficiency and lower standards of life; that national planning as finally revealed by basic action is not the guiding influence in initiating economic progress but rather the result of forces which are already at work.

An attempt would have been made to show that where national planning as conceived at present has been accepted it has hastened and amplified the reversion to agricultural self-sufficiency, and has created at the same time a situation which makes it difficult for a farmer to lift himself much above the economic level of the agricultural labourer.

In the United States all programmes for production control and social reorganization have run aground on the institutions of free ownership of land and the right to transfer and lease land. To date, nothing of any consequence has been done to modify these rights. The refinancing programme of the Farm Credit Administration followed traditional lines.

National planning for agriculture, if it is to become an effective

force in initiating and controlling economic change, must first plan and effect far-reaching abridgements in these rights. A slow evolu-

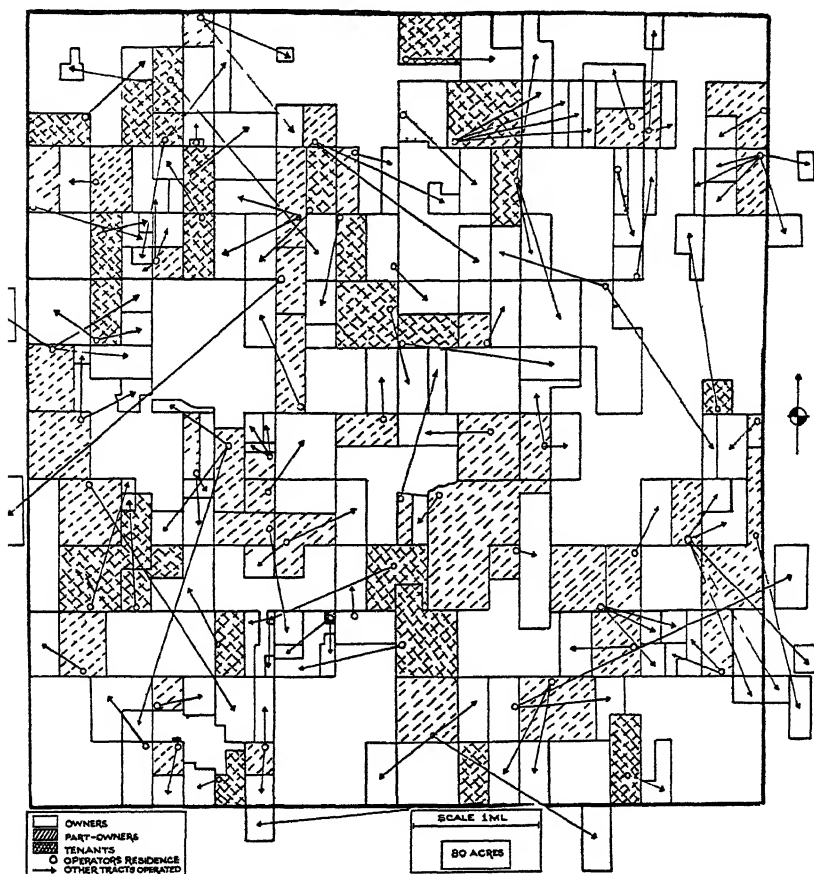


FIGURE 1. FARM OPERATION MAP FOR DEER CREEK TOWNSHIP, CASS COUNTY, INDIANA

Approximately one-half of the farms representing two-thirds of the land in the township are the result of consolidation. This consolidation represents in part a rebuilding of units disrupted by previous subdivision. No data are available to indicate the date and rate at which these changes have taken place.

tion in this direction has apparently been effective since about 1900, but it appears at the present time to be developing in the direction of surrendering to zoning, land use, and soil-conservation functions.

The effect of recent economic change on farm operation in a typical township in central Indiana is shown in Fig. 1. The location

of the operating head-quarters for each farm is shown by a small circle around the farmstead. Arrows point to other tracts operated. The cross hatching differentiates between owners, part owners, and tenants. Farms of only one tract occupy the areas shown in blank.

This township is typical of the eastern corn belt. It contains 36 square miles. From the centre of the township it is about 10 miles distant to two small industrial cities. The roads are all gravelled. The typical farm unit in this township was formerly 80 acres. Because of mechanical and other changes there has been continuous pressure to effect farm consolidation in recent years. In the township there are 223 farmsteads each of which at one time served as head-quarters for a farm unit. In 1937 there were 156 farm operating units, 76 of which consisted of more than one tract. Of the farms of more than one tract, 8 were owners, 22 were tenants, and 46 were part-owners. There were 28 landlords who lived in the township and rented their fields out. Most of these kept some live stock and retained some land for pasture. The remaining 39 farmsteads were occupied by farm labourers and others.

An individual farm consolidation is shown in Fig. 2. The original farm, shown in the circle, was bought in 1922. In 1924 the first tractor was bought, and in 1928 the first combine was bought. From 1928 to 1937 about \$1,000 annually was returned from custom work for neighbours, mostly for use of the combine. In 1931 the 160-acre tract was rented, and a corn-picker, truck, and other power machinery were added. In 1937 the 200-acre tract west of the home farm was bought and is being operated for the first time in 1938.

The farm, now completely mechanized, consists of 3 tracts with a total of 520 acres. In 1938 it is being operated with 2 general-purpose tractors with rubber-tires, 2 horses, and 2 hired men. Transportation between tracts is by automobile, truck, or rubber-tired tractor. Approximately 30 round trips per year with tractors are made to each tract. These trips require 5 minutes each way as compared with 45 minutes formerly. While this farmer has been exceptionally successful, his operations illustrate the general trend. It is expected that, in the event of sustained agricultural recovery, farm consolidations will proceed at a rapid rate.

This farmer has participated in Federal Control programmes most of the years they have been in operation, but without much change in operating plans. In Deer Creek township, shown in Fig. 1, participation in federal programmes has been erratic. Farmers have participated when they could do so without much

change in their plans and with a low cost. The better lands where clover and wheat failures were infrequent have participated most regularly. Farmers on poor farms and in weak financial condition

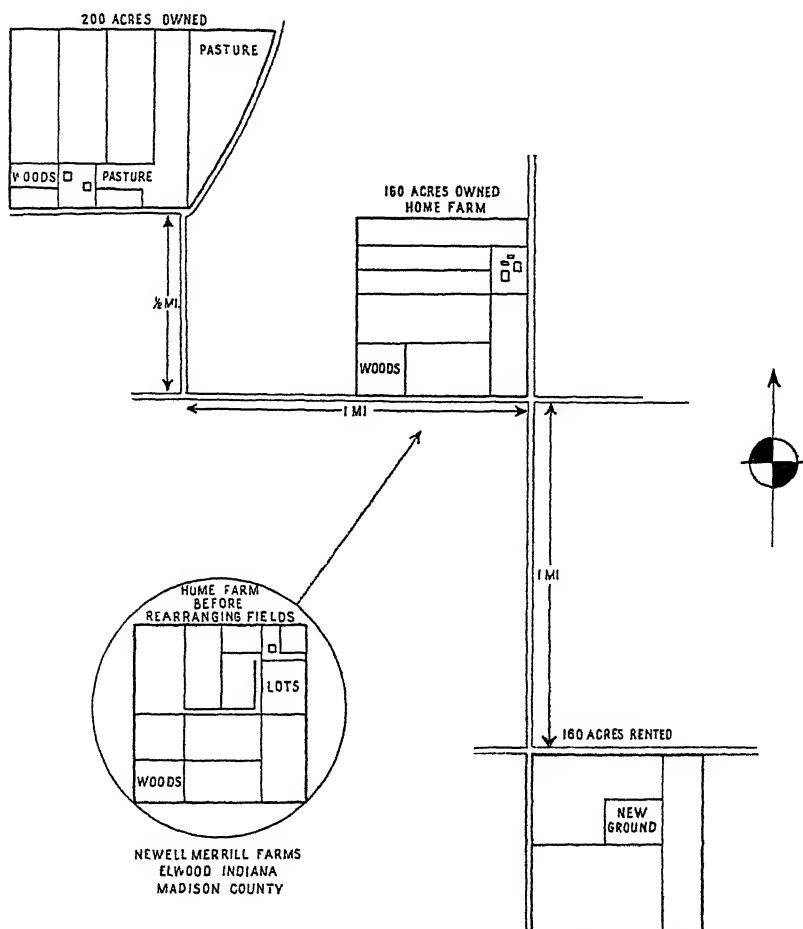


FIGURE 2. FARM LAYOUT FOR A SUCCESSFUL FARM
IN CENTRAL INDIANA

The original layout in 1922 is shown in the circle. The layout was changed for tractor-farming in 1922. The 160-acre rented tract was added in 1931 and the 200-acre owned tract was added in 1937.

have found it difficult and expensive to participate except in unusually favourable years. As compared with the effect of developments in farm machinery, crop and live-stock improvement, and transportation, production control and other federal programmes

have been negligible factors in effecting economic and social change in this township.

Throughout this area small industrial cities are developing rapidly. The decentralization of industry which is taking place is apparently the result of the effort of industry to gain access to sources of independent, mechanically skilled, intelligent labourers. Many of these labourers find it possible to live cheaply in the country, not necessarily in new houses built for the purpose, but most likely at home with the farm family or in houses released for occupancy through farm consolidation.

Of the various economic changes effective in shaping current developments in social and economic life in American agriculture, the great unknown factor is the rate and extent of general recovery in national and world economy. Recovery to old levels may not be necessary to preserve present agricultural and social organization in the United States, since many adjustments in debts, taxes, operating costs, and ownership have already been made.

The present national programme for agriculture in the United States reminds one in many ways of the recent noble experiment in prohibition which ended its fifteen-year course in 1933. After fifteen years of national prohibition we found ourselves disillusioned, but a bit more sober. After the dust has settled a little way we may find that we have made a little economic and social progress in agriculture as a result of the national programme. Economic and social progress is always slow and disappointing. We are about to demonstrate again in the United States that general plans and programmes which come down from the top bring disappointment.

County planning, which is the outgrowth of years of extension education with farmers, has developed great possibilities for the future. The chief outcome of this work at present has been to call attention to the weakness of the national programme in its local application. Some time we may learn how to break these great problems into parts, use the accumulated experience of the local communities, and slowly integrate it into some kind of national plan. This process, like education, is too slow for present leadership.

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It is not very often that a forester is asked to address a meeting of this kind, but I may say that I was originally an agriculturist, born on a farm and trained in agriculture, and, getting a top-dressing of forestry, became a forest economist. The implications of forestry in agricultural economy are not generally appreciated by either

agriculturists or foresters, but as a matter of fact the interests of these two great primary industries have many contacts which are of social as well as economic importance.

Though this brief discussion of the subject will be devoted almost entirely to the influences of forests and forest operations on agriculture, I would like to point out that forestry derives substantial benefits from its association with agriculture. These include the opening up of the country by roads and other means of transportation required for settlements, the local supply of suitable labour available from the farms for work in the woods, the local supplies of food and fodder required in logging operations, and a most important market for lumber and other forest products.

In the older settled countries of Europe, forestry and agriculture are more closely associated than in the more recently settled countries, such as Canada and the United States, where the tendency has been to consider these two forms of land use as distinct, if not actually antagonistic. In the initial stages of agricultural settlement the forests presented a formidable obstacle to agriculture. The clearing of the land required years of hard work, and it is not surprising that fire, the cheapest and most effective means of removing timber, was used extensively. The wanton destruction of timber resulting from clearing-fires caused the timber-owners to look upon settlement as a menace and incompatible with forest conservation. If the fires had been confined to agricultural lands there would have been little or no ground for complaint, but without control the settlers' fires destroyed vast areas of valuable timber on non-agricultural land as well. I think it can be safely said that in Canada settlers' fires have destroyed the timber on a far greater area of essentially forest land than of agricultural land. Within the last two decades, however, the Provincial governments have generally provided a means of control by requiring settlers to secure permits to burn, and these are issued when the fire hazard is low and certain conditions are complied with. This has greatly reduced, but not entirely eliminated, the loss from this source, for settlers' fires are still second only to camp fires as a cause of forest fires and are responsible for 16 per cent. of all the fires reported.

Another source of conflict between forestry and agriculture has been the settlement of non-agricultural lands, which has resulted in both loss of timber and the failure of many attempts at agricultural development. A careful land classification would have obviated much wasted effort and loss of forest resources.

In practically every country a relatively small proportion of the

land is suitable for profitable agricultural use. In Germany 45 per cent. is considered arable; in the United Kingdom 21.9 per cent.; in Sweden 9.1 per cent.; in Finland 7.3 per cent. is under crop; and in the United States 26.4 per cent. is classified as improved. In Canada it is estimated that 15.8 per cent. of the land is of possible agricultural value, but only 6.1 per cent. is occupied and improved, while one-third of the land area is essentially forest land and the only productive use to which it can be put is the growing of timber.

In most countries in the north temperate zone the forests occupy a prominent place in the national economy. In Canada the forest industries provide about one-tenth of the net value of production, and about one-quarter of the exports of Canadian products consist of wood and paper products. The wealth created by the utilization of the forest resources is shared either directly or indirectly by every industrial class.

In northern European countries farming and forest operations are conducted in closer co-operation than in America, where the latter are usually located at greater distances from settlement. Nevertheless, in Canada logging operations provide employment for a large number of men and horses from the farms, especially from the farms situated in the newer settlements. Except on the Pacific coast, logging is carried on chiefly in the winter when farm work is slack. During the past ten years an average of about 65,000 men have been employed in operations in the woods during the six months April to September, and about 130,000 during October to March. The peak of employment is usually in December when 140,000 are engaged, and in May the number drops to about 50,000. As a matter of fact, owing to the turn-over of labour it is estimated that at least 240,000 men, a large proportion of whom come from the farms, secure a substantial part of their income from work in the woods. In addition it is estimated that in the eastern provinces of Canada about 30,000 horses are required to take out the timber, and a considerable proportion of these are hired from farmers. Local farmers are more readily available and generally more suitable for seasonal and intermittent work of this nature than outside labour, and the money they earn is of great assistance to them.

The logging camps provide an important market for farm products required to feed the men and horses, and the cost of transportation of these products is an item favourable to the local agricultural communities. The farming population can secure supplies of wood for buildings, fences, fuel, and many other purposes

for which wood is required on a farm at much lower cost from adjacent forests than from distant sources of supply.

In the early years of this century the Dominion Government set aside certain wooded areas of sub-marginal agricultural value in the Prairie Provinces as permanent forest reserves for the use of the settlers, and the farmers drive as far as seventy-five miles to get building material, fuel-wood, fence-posts, &c., in these reserves. The value of these forests was so firmly established during the Dominion administration of these lands that since the natural resources were transferred to provincial control in 1930 the Provinces have followed the same policy.

In addition to these direct benefits derived from forest operations, large forest areas have an important influence on climatic conditions and the control of water supplies, which are of vital importance to agriculture. Whether forests induce rainfall or rainfall induces forests is very much like the question of whether the hen precedes the egg or the egg the hen, but the fact remains that there is generally more precipitation in a forested region, and I think it can be safely accepted that the climate in the centres of the large continents would be much drier if it were not for the action of the forests in relaying the moisture evaporated from the surrounding oceans.

There is no doubt that the forests do exert a very important influence in the conservation of the water and its orderly distribution. The snow melts more slowly under the protection from sun and wind afforded by the trees, and the forest soils, due to their humus content and the deep-rooting systems of the trees, are more porous than bare soils. They do not freeze to the same extent, and the snow water has a better chance to seep slowly into the subsoil from which it drains out gradually through springs or maintains the water-table in the surrounding lands. On bare land much of the snow is evaporated directly or blown off into gullies, and when spring comes it melts and runs off quickly before the ground is thawed, causing floods which are frequently disastrous and always wasteful.

The influence of clearing a watershed on the flow of streams and rivers is familiar to any one who has had an opportunity to observe the results over a period of years. On the farm where I was born, in Middlesex County, Ontario, the Au Sable river ran within a stone's throw of our house. In my youth, even in the driest summers, it was a fairly large stream in which we used to swim and fish, and we could row a boat on it for some miles. Now, with the

almost complete clearing of the watershed, there may still be a few swimming-holes in the summer, but there are no boats, and fish have almost entirely disappeared. There is still as much water carried out to Lake Huron, but it nearly all comes down in the spring, flooding the flats and lower lying fields with several feet of water. The lowering of the summer water-level two or more feet in streams such as this undoubtedly lowers the water-table to a similar extent in the surrounding fields.

Soil erosion by both wind and water generally follows too extensive deforestation. In the United States this has become recognized as such a serious economic factor that the Federal Government is providing many millions of dollars for the Soil Conservation Service, in addition to large grants for allied rehabilitation projects. Though vast sums are being spent on engineering works designed to control flood waters, it is becoming recognized that afforestation and improved agricultural methods are the cheapest and most effective means of controlling both floods and erosion.

So far I have discussed the relation of what may be considered commercial forests to agriculture, the influences of which are more or less indirect. The farm wood-lots owned and controlled by the individual farmers are of more immediate and direct concern to the farmer.

It was not until recent years and in the older settlements that the farmers of eastern Canada experienced a shortage of wood for fuel and other purposes. As yet, few farms are entirely without wood-lots, but now in the fully settled districts over-cutting and neglect have reduced the supplies of wood to such an extent that the farmers are forced to use increasing amounts of coal, and steps are being taken to rehabilitate the wood-lots by natural or artificial means.

It is not contended that wood-crops yield as high a return as food-crops on the best soils, but on most farms there is some land which, not being the best for field-crops, can be used to advantage for wood-crops. If not, I think it can be shown that it is economically sound to devote up to 10 per cent. of the farm to the growth of wood for domestic purposes. Although some food-crops are more remunerative than others, diversified agriculture is advisable from an economic standpoint.

The average value of field-crops in Canada during 1931-6 (*1937 Year Book*, p. 237) was \$10.39 per acre, varying from \$6.73 in Saskatchewan to \$17.80 in Ontario and \$33.83 in British Columbia. Taking fuel-wood alone, which is the cheapest but most important

wood-lot product, it is possible by proper silvicultural management to grow from 1 to 1½ cords per acre per annum. Based on a sale value of \$3.78 per cord, such as was placed on fuel-wood by the Canadian Bureau of Statistics during 1931-5, the financial return is very low, but this does not represent the value of the wood grown and used by the farmer himself. It should be valued on the basis of the coal for which he would have to pay cash, if he did not have his own wood.

The heating value of wood as compared with anthracite coal varies with the kind and density of the wood. One standard cord (128 cubic feet, piled) of air-dry wood of the better hardwoods (beech, yellow birch, hard maple, &c.) has a fuel value equivalent to about 83 per cent. of a short ton of anthracite coal; fair hardwoods (ash, elm, soft maple, white birch, &c.) and heavy softwoods (Douglas fir and larch) 66 per cent. of a ton; light hardwoods (poplar, basswood, &c.) and light softwoods (pine, spruce, hemlock, &c.) 50 per cent. of a ton.

The cost of anthracite coal in Ontario, not including the cost of hauling, is about \$15.00 to \$17.00 per ton, and on that basis a cord of air-dry good hardwood has a fuel value of about \$13.25 per cord, and the poorest grade of fuel-wood \$8.00 per cord, the average of all wood being about \$10.50 per cord. A production of one cord of good hardwood per acre per year in Ontario would yield about three-quarters of the average value of field-crops, while a production of 1½ cords per acre would exceed it.

The ordinary farm requires from 10 to 15 cords of wood per annum for heating and cooking, which can be grown continuously on 10 to 15 acres. If this amount of fuel-wood is produced on the farm, it represents a fuel value of from \$100 to \$200. The wood-lot will also supply a considerable amount of wood for poles, stakes, posts, &c., which are always required on a farm. If the growth exceeds the farm requirements, the excess can be sold, as there is always a demand for wood in the cities as well as in the small towns and villages.

The last Canadian census was unfortunately taken for 1930, when prices of wood products were very low, but in that year the forest products, including maple products, produced on farms were valued at \$48,800,000. In 1920, when prices were abnormally high, the value was \$72,000,000. Perhaps a fair average under present conditions would be between 50 and 60 million dollars. In 1930, 40 per cent. of the forest products was sold and 60 per cent. used on the farms. Of the fuel-wood, only 20 per cent. was sold.

Notwithstanding the advances made in specialized agriculture, farmers are generally more independent and self-sufficient than any other industrial class. On the whole their cash resources are small, and to be able to produce, at little or no expense, a necessity such as fuel is an important aid. The maintenance of a wood-lot entails comparatively little expense or effort. No special equipment is required, and the silvicultural treatment consists mainly in intelligent cutting with the objective of favouring the most desirable species and the most vigorous trees, protecting the young growth, and not cutting more than the annual growth. Natural reproduction, especially of hardwoods, can usually be secured in abundance. One essential is that live-stock be excluded, as they not only destroy the young growth but impair the porousness of the soil. If artificial afforestation is required, the planting stock can usually be secured, in Canada and the United States, from government nurseries either free or at a nominal cost.

The first undertaking of the Dominion Forestry Branch, when it was established in 1899, was to provide trees for the planting of shelter-belts on farms in the three prairie provinces. This project, which was continued by the Forestry Branch until the natural resources were transferred to the Provinces in 1930, is now carried on in the Federal Department of Agriculture, and to date about 170 million trees have been distributed. In Ontario, Quebec, and Nova Scotia the Provincial governments have distributed over 200 million trees. Expert advice is given on the care of wood-lots, and a number of demonstration wood-lots have been established. There is no reason for any farmer in Canada not securing the information necessary for the management of his wood-lot.

In Ontario, farm 'woodlands', which are defined as lands having a certain number of trees per acre, depending on the size, are exempt from taxation if they have been set apart by the owner for the sole purpose of fostering the growth of trees, and are not used for grazing live-stock. This exemption may be secured for 10 per cent. of the area of the farm, and not more than 20 acres held under a single ownership. This is a measure which might well be adopted by other governments. In Nova Scotia an officer has been appointed to assist farmers in marketing their forest products as well as to advise them on the treatment of their woodlands.

In some parts of the United States the marketing of forest products from farms and other small forest properties through co-operative agencies is proving very profitable. In this way standards are set, large contracts at favourable prices can be made, and

competition from individual owners who are not in a position to become familiar with the market conditions is eliminated.

The establishment of communal forests, which has long been an important feature of forestry in Europe, is beginning to receive attention in America, and promises to provide a profitable solution for the use of tax delinquent and sub-marginal agricultural lands which occur in many municipalities. This development will undoubtedly advance more rapidly as the success of the undertakings becomes apparent.

So far I have discussed only the economic importance of farmers' wood-lots, but they have also the same influence as the large forests on the conservation of water. It is not contended that the retention of even 10 per cent. of the area in forest will appreciably affect precipitation, but it will have an important influence in holding the snow and retarding the run-off, thereby permitting more moisture to seep into the soil. It will also reduce the drying effect of the wind on the soil and crops and aid considerably in reducing soil-drifting. It has been found in Russia and confirmed on our Canadian prairies that shelter-belts exert an influence on the snow, soil-drifting, and evaporation over a distance of from ten to twenty times the height of the trees.

Trees require large amounts of water for their own use, and where precipitation is scant they may reduce the amount of water available for the adjacent crops; but where there is an excess of the tree's requirements, stated in some cases to be about sixteen inches, shelter-belts and wood-lots have a beneficial influence.

One must not overlook the aesthetic influence of the scattered woodlands in a farming country. Agriculture should be more than an occupation providing food and raiment to the rest of the world for a minimum subsistence. It should be a mode of living which would attract those who appreciate the beauties of nature and the comfort and security of homes. What could be less attractive than a broad expanse of bare land with a group of naked buildings sticking up here and there? The lack of trees was felt by those who came from wooded homes in the east or from other lands and settled on the prairies. The extent to which shelter-belts have been planted around the homesteads on the Canadian prairies indicates an appreciation of the importance of trees in the establishment of permanent homes. Many settlers in the western prairies have told me that plantations around their buildings have added as much as \$1,000 to the sale value of their farms and that the comfort and pleasure they derived from them were worth far more than that.

It has been the practice in clearing the farms in wooded country to leave the wood-lots at the back of the farms. This is a mistake from the standpoint of the beauty of the landscape. Patches of woods along the roads broken by open vistas of fertile fields lend a charm to rural scenery, which not only adds to the pleasure of those who live in the country, but is attractive to those who only drive along the roads.

In conclusion, may I say that when forestry gets beyond the stage of exploitation of virgin stands and settles down to silviculture on a permanent crop-producing basis, the relation with agriculture will be more intimate. Foresters look forward to the time when farming settlements will be established on the better soils throughout the forests, and these settlements will supply the greater part of the labour for the woods. There are perhaps no two industries that can work together to greater advantage. They are both concerned with the growing and harvesting of renewable crops, and their activities are for the most part seasonal and dovetail with little overlap. Their differences only make them more compatible.

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If I may advert first to Dr. Booth's paper I should like to commend him for the effort he has made to provide some historical perspective for to-day's topic. He reminds us forcibly how recently agricultural economics in the New World has emerged—if it has yet emerged—from the stage of predominant emphasis on the enterpriser or entrepreneur and the assumption that whatever promotes the financial profit of the entrepreneur—whether he be operating owner, tenant, 'suitcase farmer', or supervising landlord, planter, big farmer, or little farmer—redounds to national or social welfare. One may derive from Dr. Booth's paper—though not explicitly stated—that we should draw a distinction between collective action to promote the profit of entrepreneurs, such as legislation relative to rural credit, market standards, transport facilities, rates, &c., on the one hand, and, on the other hand, policies aimed primarily at the well-being of all those engaged in agriculture—whether as owner operators, hired labourers, or tenants; and beyond all that, the bearing of such policies on the general social health of the nation.

In the United States, for example, the New Deal has suddenly precipitated the agricultural economist into this stage; and with a few exceptions here and there one does not discern that there has developed any well-defined philosophy or point of departure. Few of

us, I believe, have a clear reference in our writings and activities as to the following questions:

Are we seeking the welfare of farmer entrepreneurs (*a*) because they should be a preferred group in the nation or in society as a whole, and if so, why; or (*b*) because their prosperity is particularly influential on the prosperity of other groups irrespective of the sacrifice these groups are called upon to make to the promotion of farmer well-being; or (*c*) because the prosperity of farmer entrepreneurs will contribute more to social welfare than the prosperity of other groups, including that of farm labourers or the more disadvantaged classes of tenants? Or is our point of reference the promotion of nationalistic objectives in the newer European sense, or the measurement of welfare in accordance with some democratic standard of the majority of citizens, or again the more universal outlook of welfare of mankind as a whole?

Mr. Wilson's paper suggests perhaps less pointedly how far we have yet to go to achieve philosophic clarity on these and other questions. Undoubtedly, we agricultural economists in the New World have been much too busy with the rapidly changing day-by-day developments to provide ourselves with even an embryonic philosophic framework.

To return a moment to Dr. Booth's paper, I would criticize his over-simplification of his historical sequences. He tends to imply that commercial farming is a comparatively recent evolutionary stage that has emerged out of pioneer farming. As a matter of fact, predominantly commercial agriculture developed in portions of the South, for instance, based on the tobacco industry, early in the seventeenth century. The United States as a whole did not emerge at any particular period from a pioneer economy to a commercial economy. Taking the nation as a whole, it is true, there has been a gradual recession of the pioneer or self-sufficing phase and an increasing predominance of commercialism. Actually the emergence into commercialism occurred at widely differing intervals of time in different geographic areas as affected by location and the development of transport facilities. By the same token, the emergence of concern with collective policies to promote the farmer's financial well-being, associated generally with the development of commercial agriculture, is by no means so recent as Dr. Booth implies. In early decades of the seventeenth century one finds the tobacco farmers of Virginia developing price-fixing and production control and market quota measures that remind us of recently developed policies. Elaborate measures for standardization of quality, the character of containers,

and market inspection prevailed during the predominance of mercantilism both in Europe and America. The earlier examples cited by Dr. Booth represent mainly the first timid steps toward social control that followed the period when *laissez-faire* had swept away the comparatively intensive controls instituted under mercantilism.

I would also question the implication in Dr. Booth's paper that extreme specialization in production and the accompanying problems of instability and other disadvantages are comparatively recent phenomena. In the South, as well as in certain other parts of the United States, the one-crop system traces far back to the early years of our economic history. In a number of areas in the United States extreme specialization in market products was succeeded by a greater degree of diversification.

Finally I would submit that Dr. Booth's generalization, that European countries arrived relatively early at the development of an *Agrarpolitik* because they had to deal with 'the infirmities of age', while the New World countries have arrived rather late at the consideration of collective, as distinguished from merely enterprise, economics, because they have had to deal mainly with 'the growing pains of youth', exhibits the perils of metaphorical generalization. Actually the emergence of collective policy, as Dr. Booth indicated earlier in his paper, was more a matter of the stage of commercialism in agriculture than of historical age. A number of the countries of Europe passed out of the stage of predominantly self-sufficing agriculture relatively late, even later than was the case in many parts of the New World. 'When the economist did finally appear', to quote Dr. Booth, he may have 'found an established society', but, in most countries, it was a rural society emerging more or less rapidly into the stage of commercial agriculture and specialization in production with all the accompanying problems and necessity for collective action that have characterized the evolution of New World agriculture in even greater degree. Because of their earlier development of commercialism and its greater emphasis, the United States at least has been in the van in the formulation of collective agricultural policies.

Again, in the United States some of the most significant of the recently developed New World policies, such as the soil-erosion programme, the land-purchase programme, and the rehabilitation programme, represent attempts to repair the serious mistakes of our youthful stages of development rather than to cope with the problems of a static and decrepit rural civilization. If we have old age in our New World rural economy, it is the premature age superinduced by the excesses of youth, such as soil wastage and ill-

conceived policies of land disposal and tenure; and far from entering the comfortable complacency of an established rural civilization, the vast and sudden elaboration of new social policies reflects the attempt to cope with the excessive maladjustments that were generated in the stage of pioneering and the *laissez-faire* policies associated with the pioneer stage.

Because of my almost complete agreement with Mr. Wilson's point of view, my comments on his paper take the form less of divergence of view than of an attempt to elaborate some of his points, which he could have done better than I, if time had been available.

In recognizing that rural economy falls into two extreme patterns—self-sufficiency and commercialism—with many intermediate and indeterminate stages, one becomes conscious of the poverty of our terminology and the indefiniteness of our concepts. While the nature and the economic and social significance of the extremes have long been more or less understood, it is fairly clear that the intermediate stages are, and long have been, probably more prevalent than the extremes and more significant as economic and social objectives in rural organization. Yet we have not developed any adequate terminology to designate these various intermediate stages or achieved any satisfactory progress in their definition. Still less have we made progress in appraising them in economic and social terms. The economic disadvantages of extreme self-sufficiency are apparent. Mr. Wilson has put us in his debt by emphasizing the offsetting social values and, on the other hand, the economic and social disadvantages of extreme commercialism. But neither he nor probably any of us is so overcome by 'nostalgia for the Golden Age', as he well puts it, that we would advocate a complete return to extreme self-sufficiency. Most of us are likely to prefer to trust in some of the intermediate stages. But what stage? At this point we become incoherent for lack of definiteness in terminology and in conception. How much and what kinds of self-sufficiency are economically efficient and socially healthful? Outside of a few calculations as to percentages of income derived from commercial production and production for use we have done little to define or designate qualitatively these intermediate stages. We have done even less in determining the economic feasibility and social advantages of different types of production for use. I have a definite conviction, which I have voiced on another occasion, that the application of science to the problems of production for use, in the same degree that we have applied science to the problems of production for sale, will

point the way to a very much greater degree of individual and community self-sufficiency than most of us have considered possible.

It is a hopeful sign that the two New World economists whose papers opened this session have recognized economic and social disadvantages in extreme commercialism. It marks the passing of the intellectual myopia which, because obsessed by the obvious operating unit efficiencies of the extreme types of commercial production, failed to recognize their glaring inefficiencies when viewed in broad social terms. Now that these scales are falling from our eyes, our profession is about to enter upon distinctly new pathways of progress.

Agricultural economists and sociologists in the New World no less than in Europe are confronted with a number of dilemmas, which may well be given categorical formulation as follows:

1. Commercial specialized agricultural production is more efficient than predominantly self-sufficing agriculture per unit of labour employed and probably per composite unit of labour and capital, and will be unless new types of technical and institutional progress can promote a greater degree of efficiency in production for use.
2. By virtue of the inelastic demand for farm products, it follows that a smaller proportion of the population can find a means of livelihood in agricultural employment in commercial production. Consequently a larger proportion of the population must live in cities, with the social disadvantages widely recognized, unless non-agricultural industry can move to the country-side.
3. In the modern economic world non-agricultural employment appears incapable under present institutional arrangements of absorbing the steadily increasing numbers released by progress in agricultural efficiency. According to the estimates quoted by Mr. Wilson, nearly half of the farm operators of the United States produce only 11 per cent. of the commercial product. Potentially the major portion of this segment of the farm population could be spared to engage in non-agricultural production if there were an outlet for their services. Inability to absorb them means persistence of low standards of living, a heavy relief burden, the utilization of lands ill-adapted to cultivation with consequent impairment of natural resources.
4. In production for market we encounter the antithetical relationship between abundance and profit which necessitates restrictive policies applied both to production and sale.

5. The profit of the agricultural entrepreneur, as in other types of production for sale, is in conflict at important points with the welfare of the other classes of agricultural workers, and policies which promote the welfare of the entrepreneur in agriculture are often antithetical to the welfare of farm labourers and tenants.
6. As the economic world is now organized, commercial agricultural production appears inconsistent with economic and social stability either for the entrepreneur or his employees.
7. The lack of close correlation between material income and happiness, which has from time immemorial been emphasized by prophet and philosopher, cannot be lost sight of by the rural economist in attempting to appraise the relative merits of the self-sufficing and commercial types of economy.

In conclusion, I am convinced that the social imperative presented by these dilemmas—if I may call them so—will compel agricultural economists to reorient their field of work in the direction of a more searching examination of the economic and social possibilities of self-sufficiency (or production for use), and especially the various intermediate stages between extreme self-sufficiency and extreme commercialism.

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Our discussion to-day is not primarily of economic depressions and their causes. We are rather evaluating present economic progress, assuming a continued progress, and attempting to measure the effects and the value of that progress in terms of the social welfare of the people. We should go further than this; if possible define our social objectives; and determine whether economic programmes should be modified or strengthened to aid in reaching these social objectives. It is highly encouraging that economists are attempting to challenge their programmes from this point of view.

Secretary Wilson has called attention to the world-wide confusion resulting from the impact of science and technology on society. Overproduction is so apparent in agriculture and manufactures that many people immediately conclude (Secretary Wilson does not do so) that there must be a long-time restriction on new technological developments which increase the productive capacity of men. This is a defeatist attitude. If society is efficiently organized for distribution, it should be impossible for people to produce more than they can consume. Certainly we all desire more things. Certainly more goods can be produced. The great problem is diversification and

balancing of production and efficient distribution. It seems to me that we are on the verge of great progress in the field of distribution. This is the great problem, the great challenge of the present and the immediate future. Science ought to be as effective in solving these problems as it has been in solving the problems of production.

What are some of the characteristics of current economic changes in agriculture? Among these should be listed:

- (a) Increasing crop and animal production.
- (b) Mechanization which requires much less work done in the fields and in the barns and much more agricultural work done in factories, service stations, oil-fields, and electric utility plants. The true increase in production per man is nowhere nearly so great as is generally believed, but there is a great change in the location of agricultural workers as a result of mechanization.
- (c) Much more efficient use of man labour.
- (d) An approaching clash between a few, large, mechanized farms with labour standards, and many small owner-occupiers willing to work long hours under sub-standard labour conditions.

Secretary Wilson has well pointed out the competition between these large commercial farms and the smaller self-sufficient farms, and the advantages that have come to the smaller farms through the use of small rubber-tired farm equipment. Another very important element is the development of successful purchasing and marketing co-operatives which give the small farmer the advantages in buying and selling available to the larger farmer.

In this discussion of large and small farms we should not let our theoretical discussion carry us too far from the facts of the case. There are relatively few farms in the United States that can be classed as larger than family-sized farms, and, with the exception of a few specialized enterprises, I doubt any rapid increase in the relative importance of this group. The two classes, commercial and self-sufficient farms, are both for the main part included in family-sized farms, and there is nowhere that clean-cut distinction found, for instance, between 'small holdings' and 'farms' in England. For years there has been a tendency for the family-sized farm to grow larger. All farm management studies support this as sound, and we should anticipate further changes along this line.

With a greater degree of commercialization on farms and larger farm units there should arise a more stable and permanent farm labourer class. Little thought is being given to the social problems of this group. From the standpoint of the community their needs

will be met in the same way as the needs of the farmers. Good schools, hospitals, churches, recreational opportunities are, of course, as available for labourers as for any other group. The proper housing and home facilities for farm labourers are, so far as I know, receiving no attention from any one. Here is a glaring need in America and an instance where America is much behind European countries.

Secretary Wilson has very well stated the problem of the large groups of people in certain areas who have insufficient land, capital, and income. The share-croppers of the southern states are typical of this group. Agriculture as a whole cannot shut its eyes to this economic and social problem.

The most remarkable characteristic of the present economic depression is not its size and severity but rather a universal and world-wide acceptance of the responsibility of governments to do something to alleviate the sufferings of human beings, to maintain living standards, to prevent the mental and moral degeneration that comes from inability to continue activity in one's chosen field, and in general to protect and maintain the social well-being of the people.

Here a new force is at work. Its efforts will sometimes be wise and sometimes otherwise. But this new force presents a great opportunity to economists and sociologists, and, if our science is sound and our application is practical, a vast new opportunity opens up for our efforts.

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LAND TENURE AND THE SOCIAL CONTROL OF THE USE OF LAND

FIRST OPENING PAPER

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IN the third book of his *Wealth of Nations* Adam Smith has a chapter on the discouragement of agriculture in the ancient State of Europe. He maintains therein that the work done by slaves is, in the end, the dearest of any; for a person who can acquire no property can have no other interest but to eat as much and to work as little as possible. The *métayer* can have no interest in the investment of a part of his little stock in the improvement of the land, because the lord, even if he himself has laid out nothing, will get half of whatever is produced. Adam Smith sees the best prospect of soil-improvement firstly in the personal interest of the owner-farmer, and secondly in that of the tenant farmer, provided that his security of tenure is as certain as that of a proprietor. He adds that the to this extent favourable laws and customs of England have contributed more to the grandeur of that country than all the boasted regulations of commerce taken together.

His considerations emphasize the activity of individual interest. He is, however, very far from neglecting the fact that men live and trade, not as isolated individuals but as communities or more particularly as families. He therefore treats of the benefits and disadvantages of certain methods of regulating inheritance, of the rights of primogeniture, and of entails. He holds that, if the land is considered as the means only of subsistence and enjoyment, the natural law of succession is that of equal division among all the children of the family. The right of primogeniture, however, continues to be respected, as, of all institutions, it is the fittest to support the pride of family distinctions. Whether or not one shares this opinion, an important point of view here becomes prominent. The value of the system of inheritance and of the legal system in general, in relation to their economic effects, is to be estimated according not only to their influence on the individual interest of the producer himself, but also to their significance for the permanence and solidity of the community, above all of the rural family.

It will not be possible here to have a fruitful discussion of all the many-sided and inexhaustible problems connected with land tenure. To-day, therefore, it is only proposed to develop the line of thought which finds expression in the above-mentioned chapters of Adam Smith and in the many treatments of the subject by prominent writers before and since his time: the problem, that is to say, of the relations between the legal regulation of land tenure and the productivity of agriculture. The questions which will occupy us can, therefore, be put as follows: What are the economic effects which have been aimed at by the various countries in their regulation of land tenure? What tendencies in the laws of land tenure are to be observed in recent times? How far are they determined by the effort to influence economic achievement favourably? And what are the economic effects to be expected from them?

It will be seen that the new tendencies encroaching upon the rights of landowners are aiming at two objects which are essentially different from one another: (1) to fit into the liberal order measures of safety tending to intensify the attachment to the soil, to stop the causes of unproductive indebtedness, and to prevent injurious exploitation of the land, all of these being intended for the creation of better social and economic foundations for the permanent activity of private initiative; (2) to get the use of land controlled by the community, and thus to supplement or even to replace private initiative. This distinction will determine the line of thought in this paper.

It is by no means easy to deal with these questions; moreover, in an international conference we have to face special difficulties of terminology. When for the last time our late Vice-President, Dr. G. F. Warren, presented the Cow-bell to the President—and nobody among us could guess or fear that he did it for the last time—he told us that the tongue of this bell is the only one which we can all understand. Some preliminary definition is necessary in order to secure as far as possible an understanding on the meaning of our topic. The word *Agrarverfassung*, generally used by German agricultural economists, covers a wider field than the term land tenure which is familiar to our Anglo-Saxon friends. But I do not have to deal with the whole substance of *Agrarverfassung* or *Agrarpolitik*, nor shall I cover all that is implied in the English terms land tenure and land policy. The only part, but a very important one, with which we are concerned is the legal status of the farmer and the policy pursued by the states in regulating it.

We must begin our consideration from the point where liberal

principles were realized in the *Agrarverfassung*. This occurred at a time when the population was increasing rapidly and when the rejection of the traditional technique of agriculture, characterized chiefly by the three-field system, was making headway. It occurred gradually in Great Britain; in most European countries it was brought about by systematic legal regulation for which the name Peasant Emancipation has been coined. The political result was the abolition of those local powers, founded on landed property, which stood between the government and the rural population, and were thus an obstacle to the perfection of the modern state. Many important powers which had formerly enabled the lord of the manor to control changes of ownership, inheritance, and the assumption of liabilities were, as in many countries—Hanover and Russia for example—taken over by the state or, as in Prussia and France, completely done away with. In general, a commutation of those privileges which had had their origin in the social and political relationship of the landlord and the actual tiller of the soil was effected. To this has to be added the dissolution of the system of labour which the large estate owners, whose estates spread over eastern Europe, including Austria and Prussia after the sixteenth century, had developed with the help of their manorial privileges. In Germany the system took the milder form of hereditary servitude, but in the Slavonic countries there was in the large majority of cases a strict ownership of the body, which implied a complete lack of personal liberty.

It was legally appropriate to have a unified system of landownership in place of the various forms of division of property into *dominium utile* and *dominium eminens* and of the variously interwoven rights of local rulers, private landlords, peasants, and local communities. It is, of course, not wholly true to say of any country in the world that the Roman law of movable property has been applied to land property in its entirety and without reservation; but such a tendency dominated the legislation of most countries from 1815 to 1880.¹ The landowner received full freedom of disposition without any essential encroachments through the power of his superiors or the rights of his relations, a *ius utendi et abutendi*. This order of things was in great part systematically introduced, and was not, therefore, the product of a *laissez-faire* policy. Its substance, however, implied that the landowner could, in essentials, do or leave undone whatever he wished. Correspondingly there was a general recognition of freedom to contract, in particular for the conclusion of contracts

¹ O. G. Schmoller, *Grundriss der allgemeinen Volkswirtschaftslehre*, Teil I, §§ 123 seq. 'Das Wesen des Argentums und die Grundzüge seiner Verteilung'.

of tenancy, of personal liberty in the application by an individual of his own labour for his own profit, and of freedom in the choice of a domicile. The conviction obtained that both individual interest and the common weal would best be served by an activity inspired and given direction by open competition.

The liberal principles were enacted with special enthusiasm by the overseas countries at the time when the descendants of European peoples streamed out by sea and by rail to carry out the work of colonization, and in doing so to lay the foundations for their political and social development according to democratic ideals. The most striking token of this policy was the Homestead Law of the United States passed in 1862. Just as, when means of transport were limited, the effort of free men and the guarantee of a secured right, together with a far-reaching independence in the utilization of the soil, contributed decisively to the success of the important colonization movements of the times, so the rapid opening up of whole tracts of country in the nineteenth century depended not only upon technical advances but also and to no less a degree upon the liberal land policy.

In spite of the validity of a legal system which is unified in its principles, a large and varied number of economic conditions and conditions of living have been preserved or formed anew. Thus the systems of land tenure in the various parts of the earth present a sufficiently diversified picture. The division of landed property into large or small units had taken very different forms even before the nineteenth century, and the factors which determined this were not, in the main, technical or purely economic but belonged chiefly to political history. Varying principles have been followed in the initiation of systematic redistribution of land. Moreover, readjustment of the relationship between former lords of the manor and peasants produced very varied results. Thus in some countries the peasants obtained full proprietary rights, whilst in others they continued as tenant farmers to cultivate the land which they had, up till then, occupied. In whole tracts of country they to a large extent or even completely lost it.

The development and details of labour organization cannot be separated from these variations. After the general recognition of personal freedom a system of independent family farming was the most prominent possibility for the smaller undertakings; it might be supplemented on somewhat bigger farms by a small amount of paid labour. Farming on a really large scale was bound to choose one of the many alternatives of a wage-paying system. Traces of

earlier obligations to feudal service are often clearly recognizable in these, e.g. in the combinations of rent-contract and obligation to work which became common in Russia and Rumania after the emancipation of the peasants, or in the conditions of agricultural labourers in the north-eastern parts of Germany where the labourer's family had to provide several hands to work in the cultivation of the estate. Then, too, the combination of numerous family farms controlled by the landlord into a sort of decentralized estate farm, such as is common in South Europe, especially with the assistance of *métayage*, is frequently the continuation, under a changed legal system, of a former manorial union.

Frequently, in fact, the actual state of affairs corresponded but slightly with the written content of law or contract. The attitude of his landlord was often of far greater importance for the tenant farmer than the text of the law or even of the contract of tenancy. There are numerous examples to show that actually an extraordinary permanence and, it is not too much to say, a state of ease in the relationship between tenant and landlord obtained under conditions of contract which reserved all advantages to the landlord. This was the case as long as the landlord acted graciously and benevolently, and only made use of the strict form of the contract in order to exercise a favourable influence on the economic achievement of his tenants or, when necessary, to get rid of a slovenly tenant. In the same way the living conditions of the country labourers are frequently much more determined by the presence or absence of a sense of responsibility and of a social or patriarchal attitude on the part of the employer, than by legal or contractual regulation. Indirectly, of course, the legal conditions are also important. They can provide a support for a valuable mental disposition or can, on the contrary, contribute to its decay where a contradiction exists.

The most intimate human relationships are precisely those which it is impossible to formalize by laws or contracts. This is clearly seen in the matter of inheritance. During the nineteenth century in many countries the general principles of common law were extended to rural affairs and laid the foundation of completely equal claims for all children of a family, even giving each one of them the right to get the parental farm sold by auction in order to facilitate a complete and equal division of the inheritance. It was then that the counteracting customs and views of the peasants gave evidence of an admirable vitality. The dangerous breach between the principles governing the legal order and the temper of the people which corresponds to the popular sense of justice was at that time minimized by

the liberal character of the laws, because the current legal freedom to dispose and to bequeath allowed the peasants to do what by tradition they considered appropriate for the maintenance of the farm and of the relation between brothers and sisters.

If we describe the years from 1815 to 1880 as the period of liberal policy in land tenure, we must not consider that the period is thus strictly limited—either at its beginning or at its end. The theories advocated by Adam Smith had already attained a large predominant influence in the eighteenth century, and German monarchs had already initiated the emancipation of the peasants in their territories before the French Revolution of 1789. In this way they not only conceded to the peasants the abolition of feudal rights but also prepared the way for the transference to them of complete ownership.

On the other hand, the kindling of the private landowner's interest only reached its peak in Russia at the beginning of the twentieth century. At that time the land reform of Stolypin not only strove for the abolition of the village community and of the *Gemengelage*; even more important perhaps individual ownership by the head of a family was determined upon and took the place of the family ownership which had obtained until then. Stolypin himself based his policy on the intention of placing the peasant in a position to free himself from poverty and ignorance and to introduce a steady utilization of the soil. His saying is well known: 'We have placed our hopes not in the weaklings and drunkards but in the strong and powerful.'

Here, perhaps, the expectations which the statesmen of the entire world attached to the above characterized policy of landed property find their most clear expression. Of course, these expectations were, not in the least important degree, of a political nature; the desire was to encourage the awakening of a state of mind among the peasants which would make them reliable supporters of the state and of its constitution. Hand in hand with this went the economic aim of establishing a supply of agricultural produce as rich and as permanent as possible, in other words, of encouraging economic and technical progress. The individual agriculturalist should himself be sensibly interested in this progress, and he should be placed in the position to employ his interest without restriction. So far as the danger, inherent in this policy, of an uncontrolled exploitation of the land which would be productive only for a short time, was seen at all, it was held to be best met by giving as free a form as possible to land holding; for it was considered that the landowner

would develop the land not only for his own life-time but for his children and grand-children. It was expected also of a landlord that he would in his own interest prevent his tenants from 'mining' the soil and would, on the other hand, make it possible for them to improve their cultivation, even to the extent of providing sufficient capital.

Schmoller mentions two tendencies which are to be met again and again in land policies: (1) increase of free individual ownership in the interest of technical progress, and (2) the subordination of all private ownership, its size, its alienability, the extent to which it can be indebted, and its inheritability, to the common interest of the state. In the period referred to, special stress was necessarily laid on the need for increase of agricultural production owing to the unprecedentedly rapid growth of population. Thus the two tendencies, according to the general opinion, harmonized in such a way that the best correspondence with the common interest of the state was attributed to the freedom of individual ownership. From this freedom it was expected that the land would find its way to the best cultivators, and, even from the point of view of national economy, he was considered as the best cultivator who was able in the long run to obtain the highest rate of income from agriculture for himself and his dependants.

During the last fifty years, however, doubts as to the wisdom of such confidence have won ground in most countries, and, at first partially, more strongly after the Great War, and almost universally in the last decade, these doubts have given rise to new directions in land policy. Only a few countries, however, have completely abandoned the liberal basis. The general aim has been to maintain the benefits of ownership, but to eliminate its conspicuous abuses.¹

At the beginning of the nineteenth century conservative politicians and national economists of a romantic tendency had already appeared in opposition to the liberal system of land-ownership, more especially against the conception which rules Thae'r's Prussian Edict for the Culture of the Land (1811). According to this edict every one could reduce the size of his farm by sale or increase it by purchase, and could dispose freely concerning it, during his lifetime as well as on the occasion of death. This was said to be the surest and best way of protecting the landowner from debts and of encouraging the cultivation of all land holdings. The Baron v. Stein attacked these principles, particularly in his old age. As he expressed himself,

¹ E. G. Nourse, *Agricultural Economics*, Chicago, 1916, p. 261.

he did not wish to see a capable, strong, moral, respected class of moderately well-to-do landowners turned into a mob of day-labourers and poverty-stricken allotment-holders. 'I am well aware of the fact', he says, 'that this opinion is opposed to the point of view of those for whom the chief purpose of the state is to increase population and the production of food-stuffs; for me, however, it is religious, moral, intellectual, and political perfection.'

The movement against the existing conception of landed property became noticeably stronger and more widespread after the period 1880-90, first of all in those countries which had long been occupied. The German political economists of the historical school frankly recognized that the technical impetus to agriculture, resulting in increased production in the older civilized countries and tremendous extension of the area under cultivation, had exceeded even the highest expectation. However, they in no way overlooked the fact that a certain amount of damage had occurred, especially through the destruction of valuable wood-land and through attempts to colonize unsuitable land such as had taken place in the impetuously opened-up new lands. Decisive for them was the fact that, to use Sering's expression,¹ they did not consider rural land property merely as an institution for the production of foodstuffs and raw materials. Thus they demanded a new formulation of the law of peasant inheritance for the maintenance of a numerous, truly independent, physically and mentally healthy peasant class. Furthermore, they demanded a limitation of the extent to which land could be indebted and national measures both against the over-division of land and against the conglomeration of large private possessions. They demanded internal colonization and were impelled to do so by reason of the seriously large flow of men from the country to the New World or to the large cities of their own land; a flow which depopulated the country-side, particularly the districts with large estates in East Germany.

Since the end of the nineteenth century most European states have adopted internal colonization and, in this, found the support of liberal politicians. By so doing they recognized that systematic measures on the part of the state are necessary for the establishment of a sound distribution of land. The determining factors in the desire for the conversion of big country estates into family farms were for the most part of a national or sociological character; the hope existed to a large extent, however, that a favourable influence would be exerted upon economic achievement.

¹ *Landlicher Grundbesitz in Wörterbuch der Volkswirtschaft*, 3rd and 4th ed.

Throughout all this the fundamental position of the landowner still remained everywhere unaffected. The possibility of dispossession for purposes of internal colonization arose only in a few places, and even there with very cautious limitations, in the period before the Great War. It was, of course, important that newly formed settlements, e.g. in Prussia, should be given a new legal status, that of the *Rentengut*. The Prussian State, which incurred a large expenditure on internal colonization, accorded only a restricted ownership to the settler. There was a special rule, differing from that of common law, dealing with the question of inheritance. Every alienation, all borrowing on mortgages, all sub-letting was subject to the approval of authority. The authorities could also, especially in the case of bad management, exercise the right of repurchase, wherein, however, there was no intention whatever of subjecting individual farm management to official control. The fact that in Prussia in 1906 it was made possible for the rural landowners to subject their possessions to a limit of mortgages was more important in principle than in practice. Far more important were the English Agricultural Holdings Laws which considerably limited the principle of freedom to make contracts, in order to place the tenant farmer in a more secure position, but at the same time took action to ensure the independence of the tenant in his farm management.

During the Great War, and above all shortly after its end, the measures directed towards a supervision of changes in ownership and towards a redistribution of landed property were considerably strengthened, particularly in east and middle Europe. As early as 1917 Soviet Russia had ordered the socialization of the entire system of land holding. It is true that at first it did not occur to the peasants to accommodate themselves to this regulation, and they took independent possession of the lands of the big private estates. In order to avoid a complete collapse in the supply of agricultural produce, the Soviet Government found itself compelled to give way, and in the Agrarian Code of 1922 recognized an inheritable right of use for those who, with their families, themselves cultivated the soil. The effect of this appeal to the interest of the peasant cultivator was a perceptible increase in the production and delivery of foodstuffs in the following years.

The principle that the land should only belong to him who tills it had a strong influence on the so-called Agrarian Reforms of the eastern European countries adjacent to Russia and in the Balkans. These reforms were accomplished by the dispossession of rural

landed proprietors on a scale exceeding all previous measures. Even the obligation of the state to grant an appropriate compensation to the dispossessed, which had formerly been universally recognized, was either not admitted at all or not fulfilled in practice. The land was transferred to the peasant masses of the dominating nationalities in the country; in Estonia under tenancy in anticipation of conversion to complete ownership at a later date; in other countries with immediate ownership limited only in Poland and Latvia by the prohibition of alienation and division. Expectations of an economic improvement in agriculture were not completely absent from these revolutionary measures, without, however, a national regulation of soil utilization coming into consideration. They were, however, first and foremost a weapon in the struggle of the nationalities for possession of the land. Moreover, they were intended to satisfy the politically excited peasantry and thus to nip the Bolshevist agitation in the bud.

It is impossible to ascertain the economic results with complete clarity. There is no doubt that a considerable decrease in agricultural production has taken place. It is, however, impossible to say how much of this is attributable to the devastating effects of the Great War and how much to the agrarian reforms which, with their small peasant's ideal of an *égalité des fortunes*, ran contrary to practical economic requirements. And if the agricultural achievement in these districts has since been brought to a notably higher level, it is still an open question whether this improvement would not have been much greater still without the methods of the preceding period.

Far-reaching possibilities of dispossession were also created in the German law of 1919 for internal colonization and in the legislation of Austria, Hungary, and Finland. In these cases, however, there was the deliberate retention of appropriate compensation, since in any case these countries, like Great Britain, the Scandinavian countries, Holland or Italy, who at the same time encouraged the expansion of rural small holdings, did not intend a revolution so much as a reform of their system of land tenure.

The aims of an intensified internal colonization are set out and argued very forcibly in a memorandum written by Sering on the above-mentioned German law. He was able to win over the Social Democrats, who had attained to political power, for a policy which was essentially foreign to them, that of the increase of an independent peasantry. He emphasized the necessity of establishing a balance between industry and agriculture in Germany and of resolutely increasing small agricultural undertakings to this end. They

were in a position to provide the nation with the highest possible quantities of foodstuffs and raw materials provided that they were supplemented by co-operative unions and other organizations of the community. They produced, moreover, numerous capable, well-brought-up, and work-loving people, and thus the maintenance of large, well-managed country estates which was desired by the national economy would be coupled with an extensive internal colonization.

The countries of east and middle Europe also legislated, in the years following the Great War, for the protection of land held by tenants. These laws were intended to protect the tenant farmer from eviction and from an immoderate increase in rent. As emergency measures most of these laws were valid only for a limited time. In many places efforts were made towards a thorough and permanent reform of the law of tenure. The English Agricultural Holdings Laws which had a pronounced effect in this direction were extended in 1920, Belgium passed a new law of tenancy in 1930, Holland in 1937. The United States, too, has raised the subject of a reform of the law of tenancy and has commenced its preparation in recent years. Especially measures have been adopted to facilitate the acquisition of ownership by tenant farmers. Like most of the newer countries it is faced with the task of accommodating the land law, which was appropriate to the impetuous extension of simple methods of cultivation, to the stronger tendency to permanent occupation, which has come with the improvement and intensification of agricultural methods. Here is to be found the reason for the efforts against the treatment of the soil as if it were merely a profitable investment, a commodity which could be freely alienated, and the endeavour to attain a high measure of security. This problem has nothing to do with a general social control of the use of land, just as little as had the growing repression of freedom to contract which had been carried out up to that time in the tenancy laws of the European countries. The purpose is merely to create conditions more favourable to the success of initiative on the part of the tenant.

The widespread contention that private landowners and small corporations, who together form by far the most important group of landlords, are, as a result of the changes in economic and social conditions, no longer in a position to do justice to their task in the system of national economy goes, it is true, much further. From this contention arises to a large extent, and especially in Great Britain, the demand that the state should take over the tasks of the landlords, a demand which carries with it the idea that the law of tenancy should be progressively developed to a sort of hereditary tenure,

cultivating tenure. Such endeavours are associated with the theories of the land reformers, which were developed by Henry George towards the end of the nineteenth century. They required, in the beginning, a transference of landed property to state or community ownership in order to do away with the injustice which they considered to be bound up with the private receipt of ground-rents; later they took a more moderate course and, particularly under the leadership of Damaschke in Germany, were prepared to content themselves with a limitation by the state of private ownership of land and with an almost 100 per cent. taxation of ground-rents.

Even in the time of the liberal land policy there remained a few exceptions from the principle that the private landowner and cultivator should be independent in the development of agriculture. Even at that time most countries deliberately used their own government lands as an important instrument of agricultural policy. They promoted the extension of family farming by the method used in alienating their lands, as was the case in the great countries overseas, and, though of course to a much more limited extent, in the internal colonization of European countries. Over and above this the most varied aims were followed in the disposition of government lands. The letting of government land was, in many cases, meant to create especially favourable conditions for the expansion and operation of private initiative on the part of the farmers, and often met with excellent success in places where the administration of the Public Domain was of a high standard. Almost everywhere government-farmed estates are found which serve the purpose of model, instructional, or experimental farms, and provide a valuable complement to the privately possessed middle-sized or smaller undertakings.

Actual cultivation on the part of the government is at its strongest in the department of forestry, and owing to the long periods of production, periods which exceed the lifetimes of several generations, it has met with conspicuous success—in any case greater than that which could have been attained by private or communal forestry on a small scale. Government control of forestry has therefore been established in those countries where the small farmer predominates, e.g. in France and in South German States since the beginning of the nineteenth century. This principle was not extended to the entire German Reich before 1933.

But even in forestry, particularly favourable as it is for government management, it has been demonstrated that an exclusively

national administration is not the best possible method. Important progress has been made by large private owners of woodland, whose methods were adopted with an eye to the future and not merely for their own lifetime; for this an appropriate state of mind and a sufficient supply of wealth were necessary. Apart from this a form of legal limitation has proved beneficial to a considerable extent for forestry undertakings, i.e. the permanently inalienable, indivisible, and unmortgageable entail.

The system of strict entail has persisted, too, for agricultural landed property in almost all European countries. The opposition of political liberalism compelled its repeal in the periods of revolutionary movements, for instance after 1789, 1830, and 1848. In many cases a revival has taken place. The system was finally abolished in Spain, from which country an important tradition has come to us, in Portugal and France (about the middle of the nineteenth century), and in Italy (soon after the political union). In Germany, Denmark, and the Succession States of Russia and Austria-Hungary its repeal did not take place until 1918. Traces are still to be found in Hungary, and in individual cases in Sweden, Norway, and Great Britain—in the last side by side with the widespread, more elastically regulated system of entail.

The attitude adopted towards family entail is chiefly dependent upon the acceptance of the formation or maintenance of a special aristocracy of large landed proprietors as a thing to be desired from the political point of view. Even if so, there still remains a doubtful question from a social point of view, that a too widespread movement in this direction would exclude large parts of the rural population from the possibility of acquiring land. The system of entail has received far less approbation for the economic development of agrarian cultivation than for forestry. It is regularly indicated in the extensive publications on the subject by European agricultural economists that the prohibition of distraint makes it more difficult to get sufficient credit. The high degree of security which the family entail offered to its holders has been frequently made responsible for a neglect of economic achievement.

The German *Reichserbhofrecht* of 1933 shows a relationship with the system of entail in the restrictions it places upon the landowner, in the regulation of succession, and in its treatment of the non-inheriting children. Its regulations are not, however, intended to maintain individual families in a superior and influential position. They apply rather to all independent farms up to a limit of 125 ha. in order to ensure the fulfilment of those tasks which National

Socialism has given to the entire farming population. The *Erbhofrecht* can be extended with special permission from the Minister of Agriculture to apply to larger estates. The farms thus controlled are only alienable with the consent of a special court called the *Anerbengericht*, and this is also required before mortgages can be incurred. Distraint on such a farm is impossible. If the owner farms badly or culpably neglects to pay his debts, he can, at the instance of the special court, lose the power to administer his farm, or even his possession of it. In addition to this there is a new regulation of inheritance whereby the transference of the undivided property to one child—in principle to the youngest son—is laid down. The other children or relations are entitled to support and education but have no claim on the capital value of the farm. Exceptions to this rule require the permission of the special court. Thus the freedom to bequeath is abolished.

Approximately half of the arable land of Germany is now under the *Reichserbhofrecht*. The homestead law resembling it in some respects has but little importance for agricultural holdings. It was established by an Act of 1920 which was chiefly meant to realize the ideas of the land reformers. Its name had been borrowed from the Federal Homestead Law of 1862 fixing the distribution of the public domain in the United States, but essentially it was much more like the Exemption Laws prohibiting distraint on rural property which several States had adopted according to the model of Texas. For all rural property the idea of ownership has acquired a new meaning in National-Socialist Germany. Private property is no longer, to use an expression current in former times, burdened with a social mortgage; it is limited in its very idea in relation to the needs and demands of the community. This is shown by the extension of the power to dispossess for purposes of rural planning and of town-building, in the imposition of the obligation to obtain permission before alienating or letting property—in which case the amount of the purchase-money or rent is controlled—and in the obligation to cultivate productively. The carrying out of consolidation in order to create pieces of land of a practicable size has also been considerably facilitated.

A complete understanding of the regulations of the *Reichserbhofrecht* and of the new conception of the whole idea of property is only possible when one considers the marketing regulations for agricultural produce imposed by the *Reichsnährstand*. A general view shows that agriculture should be freed from that economic system which is characterized by the word capitalism. Ruhland, who saw

in capitalism the decisive cause of the agricultural depression of his time, had demanded this even before the War. Even though the German *Reichsnährstand* has refused as a matter of principle to control the management of the farmers in individual matters, it has nevertheless effected a far-reaching social control which not only affects the distribution and inheritance of rural landed property but also the utilization of produce, the determination of prices, and, because of this, the manner of utilizing the soil.

The medieval system of agriculture was very far from concerning itself with controlling the utilization of the soil. It is self-evident that this problem was not present to the liberal agricultural policy. But even the endeavours which have already been described and which have brought about reforms of the liberal land law in the last half-century are not, as has been repeatedly emphasized, intended to take the decision as to how the land is to be utilized out of the hands of the private cultivator. Together with these efforts towards a new land law serving chiefly to maintain a permanent farming population, other plans and measures have made their appearance—also for rather more than fifty years—which have as their definite purpose the control of the use of land. It is necessary to make their nature, origin, and results clear in what follows.

First of all we must deal with Marxist socialism. Its supporters had originally expected with certainty that the peasantry would be displaced by large capitalist undertakings. It was their wish to abolish this capitalism and through the strength of the proletariat to create a new socialist order of society from which they, at the same time, expected a more abundant supply of commodities. These endeavours found their most logical development in the policy of collectivization, introduced in Soviet Russia in 1927, by which the possibility of operating independent family farms has been for all practical purposes completely abolished. Collective farms which have to operate according to the directions of appointed officials determine to a preponderant extent the cultivation of the Russian soil. On them, as on the purely government estates, the peasant has become a dependent conscript worker. Only as far as stock-farming is concerned have the individual families once more obtained a certain measure of personal control, because of the definitely unfavourable experiences which were incurred in the attempt to collectivize stock-farming.

The aims followed by the collective system are first and foremost political in character—a fact which explains the energy with which they have been prosecuted. Precisely because of its materialistic point of view it would be impossible for the Soviet Union to suffer the

predominance of peasant family farming, for it fears from this an influence contradictory to its economic planning and even a danger to its political power. At the same time, of course, it was confidently expected that agricultural production would be favourably influenced. Reliance was placed upon the superiority of centralized planning as opposed to allegedly chaotic production, and in particular upon the introduction of new technical methods, especially those of the tractors and combines which had so conclusively proved their worth in America—there, of course, in the vast majority of cases in the hands of independent farmers.

In point of fact, however, centralized planning does not yet constitute, in itself, an economic asset, and it is not merely the technical perfection of implements and machinery which decides the success or failure of economic achievement. The type of community in which men live and farm, and the state of mind and readiness to work which are founded therein, are often of far greater importance. After a short time the well-known devastation in stock-farming and the diminution of crops set in, which occasioned the appalling, widespread famine of 1932. Even though the agricultural output has since then attained a higher level and although a generation may be growing up which would adapt itself to the new conditions of life, it is nevertheless true that the agriculture of Soviet Russia has lagged noticeably behind the progress which has been made in other countries by independent owner and tenant farmers, and has not maintained the strong forward impetus which was noticeable in the years before the Great War, particularly after the reform of Stolypin.

A second source of a far-reaching social control of the use of land is to be seen in the war-time economy, particularly in its application to those countries which were cut off from world communications. In order to carry out their policies affecting food production and prices, they subjected agricultural produce to national administration and commandeered the produce for this purpose. They moreover limited considerably the right of the landowner to dispose freely of land. The nature of the war-time economy sprang from the conviction that the accommodation of the supply of foodstuffs to suddenly quite different circumstances, made all the more difficult by the disappearance of former sources of supply and by tasks of a completely new type, should not be left to an uncontrolled price-system and to the measures which would be adopted by the farmers in response to it. The war-time economy was relatively quickly and thoroughly set aside at the conclusion of hostilities. It continued, however, to have an indirect effect; several regulations of fundamental

importance remained in force, and the idea of a social control of the use of land acquired new strength for the purpose of national defence, as confidence in the continuance of a regular and prosperous system of free trade declined.

The economic depression, which has been made manifest to the whole world in a series of agricultural crises, is also attributable to the Great War and more especially to the method of its conclusion. From the methods of combating this depression, from measures both towards debt reduction and towards price control, new tendencies to social control of the use of land have been developed.

Many countries, particularly in central and east Europe, prohibited distraint on agricultural possessions in the times of crisis after the Great War by a series of measures for conversion and reduction of debts; and it has not yet been reinstituted in many places even where a departure in principle from liberal land law was never intended. This has led to an organized supervision of the indebted farmer and thus the methods of individual credit control and of promoting improved farming methods initiated by large credit organizations have been still further developed.

The influence which the state exerts upon farming conditions is a strong one, and it requires a much more complete fulfilment of national needs than was formerly the case. But when the farmers find themselves unable to meet their debts, the state does not merely leave them to their fate but feels itself obliged to prevent the decision as to the economic existence of the farmer being left in the hands of his creditors.

The far-reaching measures for improving the prices for farm produce which have been adopted since 1929 by almost all countries in the world are, as I was able to show at the meeting of our Conference in 1936, moving towards the combination of agricultural producers in compulsory syndicates. This implies an important restriction of their power to dispose of the produce, no matter whether the boards which regulate the market are created by a majority vote of those interested or by the disposition of authority. The development has not slackened, despite the fact that, at least temporarily, considerable rises in the prices for agricultural produce have occurred. Often, too, practical or legal influence has been brought to bear on the extent or selection of areas for cultivation and on the amount of live-stock. The policy inaugurated by the United States since 1933 is worthy of special attention both for the scale of its effects and for its principles. In its effort towards adjustment of the agricultural production and marketing of agricultural supplies the Federal

Government has left the farmers free to decide, at least from the legal point of view. The support of prices is no longer the all-important aim; rather has the conservation of the soil come to the fore. Moreover, thorough study is being made of means of accomplishing a redistribution of land which would favour sizes of farms rationally adapted to the requirements of agriculture and to modern technical conditions.

Here the two problems which lie at the bottom of all land policies arise: How can the distribution of land help its cultivators to work under the conditions most favourable to production? How is it possible to provide that the soil will not be exploited in the interest of the living generation alone, but that its productivity will be maintained in such a way as to supply permanently the needs of the community?

In the nineteenth century, when more or less complete free trade between the various countries in the world was a matter of course, a supply of produce as rich and permanent as possible was, as we saw, regarded as the need of the community. The older conception has undergone a considerable change in recent years. Owing to the efforts towards a self-supporting organization and the fear that markets or sources of supply might be completely cut off by political complications, the various countries are concerned to effect a utilization of the soil which will guarantee the highest possible degree of independence. They did not seek to attain this object merely by bringing influence to bear on the prices of agricultural products, but also by giving farmers a legal status which compels them to take into account the demands of the political leaders.

From the basis of what has already been said we can now proceed to the definite questions of to-day's paper: (1) What importance had and has the legal position of the agriculturalist for economic development? (2) What economic prospects are opened up by the more modern tendencies to social control of the use of land which have been seen to exist?

The first of these two questions is frequently raised in order to compare the advantages of the owner-farmer with those of the tenant, and at the same time to investigate the merits or disadvantages of the different forms of tenancy. A few examples will make clear the necessity for great caution in the distribution of praise or blame. Holland, with almost 50 per cent. of its land held under tenancy, and Denmark, with no more than 5 per cent., are both, beyond any doubt, countries which hold a leading position in agricultural progress. It is impossible to ascertain any variations in

the economic achievements of the farming in Canada and in the United States which even approach a correspondence to the proportions of tenant-held land (about 10 per cent. to 40 per cent.). As has already been shown, the mentality and capability of the men concerned are the influences which chiefly determine economic achievement even under identical legal conditions, and their effects are everywhere more noticeable than those which proceed from the legal position. Even the categoric objection to *métayage*, made by Adam Smith and many other writers, that it retards economic progress, is not applicable here, where the transference of agricultural undertakings from one generation to another occurs—as is certainly often the case in North America—with the help of contracts of share-renting, and where an experienced father uses the opportunities offered him by the law to control the agricultural procedure of his son for the latter's benefit. This is true wherever a form of patriarchal relationship obtains. It has been observed in all countries that the heavily indebted landowner is often in a less favourable position and is more negligent in his treatment of the soil than the tenant farmer.

In spite of very important reservations applicable to individual cases, a number of fundamental considerations as to the general importance of the legal position of the agriculturalist for economic development can be put forward. To do this we must, it is true, adopt general premises as to the way men think and act; but this method is the more reliable since, with certain limitations, we are chiefly concerned here with men of the white races and of the present time. Their representatives tend in the vast majority of cases to be stimulated by the prospect of economic profit, although it is true that their achievement decreases when conditions of life and the making of profit become too easy. They are not merely concerned to work for their own comfort but for the support of their families, and they provide, moreover, not merely for their own lifetime but for their descendants. Great differences exist, of course, in and among the individual nations as to whether the soil which is tilled is regarded only as a source of income for the living or as an inalienable home for the children. Where the mentality of the individual leads him to use the soil with an eye to the preservation of its value for the generations which follow, the danger that the soil will be 'mined' is relatively small, and in times of favourable economic development the state can, in essentials, leave the maintenance of the productivity of the soil to private initiative—at any rate, in as far as the individual farmers are acquainted with the needs of the soil.

When the government considers that such knowledge is not sufficiently widespread, it will be able to supplement its general activities of instruction and education by offering special economic advantages to those who follow its advice, to those, that is, who select certain methods of cultivation which do not exhaust the soil. As we know, the present-day Soil Conservation Programme of the United States is proceeding along these lines. If, incidentally, it is desired to counteract the tendency (which can never be completely destroyed) to 'mine' the soil for the purpose of immediate profit, that which Thaer has said in an often-quoted sentence on the drawing up of contracts of tenancy holds force: 'If a whole college of the cleverest economists and lawyers worked for four weeks to produce a contract of tenancy, it would either still fail to protect the estate from a really avaricious and cunning tenant or it would have to be framed in such a way as to paralyse the good tenant completely.' All regulations which limit to any important degree the farmer's power of disposition bring with them the danger that the very farmers who are the best and most capable will be obstructed. A complete economic success can, then, only be expected if it is possible to raise the average and to educate men away from the crafty and avaricious pursuit of short-sighted self-interest.

As far as the possibility of influencing the individual by means of an organized pressure on the whole is concerned there are considerable differences arising from tradition and political constitution. The agricultural policy of Soviet Russia is to a high degree based upon the supposition that the incentives which spring from the family mentality of the peasants, or from individual effort for profit, can be replaced or even exceeded by such pressure by the community at large. An estimation of the economic prospects of this policy is essentially dependent upon the extent to which this expectation is justified, and above this is, of course, the moral assessment of the forces and ties which are destroyed by systematic repression or suffocation of the family community or of individual effort. This decision can only proceed from faith and, here too, it is bound up with the question how and to what extent the powers of this world can so transform the hearts of men that they joyfully sacrifice their personal interest and care of their dependents to the needs of the community.

Especial attention must, however, be paid to the particular character of agricultural production. It is concerned with the organic growth of plants and animals, and its success depends to an especially high degree upon the exact knowledge and painstaking treatment of each individual piece of land, of each individual animal. Still

more must the character of the conditions of production be taken into account when an intensive and diversified type of farming is practised. If it is sufficiently difficult to manage the exclusive large-scale production of wheat and ranching according to a generalized, more or less schematic system, so much the more is technical progress in the more intensive types of farming based not upon standardized methods but upon individualization, upon painstaking and conscientious adaptation to particular conditions. Intensive agriculture brings with it considerable difficulties, even for the success of large individual undertakings; still more is this the case in the exercise of an authoritative control, even when the powers entrusted with this task have notably good men at their disposal.

To sum up one can put the matter as follows: According to the principles of psychology which have been laid down, countries which aim at agricultural progress, in the sense of a maximum supply of commodities without attributing an especial value to the delivery of a particular type of produce, will best attain their object by creating as favourable conditions as possible for the encouragement of private initiative and competition. Important, too, is the security of the legal status. But a security which goes so far that his land can only be taken from the farmer in the case of clearly culpable neglect of his duties compels the renunciation of a part of the economically favourable effects which are attainable by a generous utilization of credit. A limitation of the freedom to contract in particular fields—for instance, in the relation between landlord and tenant—can easily occasion a tendency to other legal forms and methods of cultivation which do not offer the same prospect of agricultural progress.

Now, at the present time, almost all importing countries are concerned to produce at least a definite minimum proportion of their supply of foodstuffs, of raw materials, and of certain prescribed types of produce from their own land; whilst the countries with a surplus production, whose available markets have been sensibly narrowed, systematically encourage their farmers to take part in the competition for those markets which still offer prospects of advantage.

The politicians who determine these things do not believe that the principle of freedom of disposition for the producer and the middleman guarantees the attainment of these objects. The result is that a legal system is brought into being which, for the sake of actual or alleged political requirements, subjects the production and sale of commodities to the direction and regulation of the state or of organizations which it has instituted. Only Soviet Russia has, to this end, completely renounced the operation of private

initiative and effort. In other countries it is to be complemented and given a new direction by systematic national organization and by educative measures. There is no doubt whatever that forces capable of playing an important part in agricultural progress are in this way called into being and set in action. The question is whether they will be sufficient permanently to attain those successes which were recorded by the system of free disposition by the farmer. The final decision, however, lies in the answer to the question whether the men who till the soil still really desire this freedom of disposition with its corresponding hardship in times of economic failure, or whether they prefer an activity less rich in prospect but promising greater security according to the directions and under the protection of an organized community. If, together with a slackening in the birth-rate, the courage for personal responsibility, with its possibilities of brilliant or devastating results, fails, then the system of land laws can no longer be built upon its former basis. When, however, the legal system itself contributes to the suppression of this courage and of the willing initiative which spring from it, then, even though it is politically justifiable, it will bring about conditions which do nothing to encourage progress in agriculture.

The justification of the principle of freedom of disposition for the agriculturalist is not, however, entirely determined by the consideration of agricultural progress: for families and peoples do not live by bread alone any more than men themselves, nor can material gain compensate for the loss of their souls. We shall not, however, treat here of the definite moral, political, and social aspects of the question. Let it be enough to say that agricultural progress is an indispensable means to the attainment of the more important moral, political, and social aims.

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LAND TENURE AND THE SOCIAL CONTROL OF THE USE OF LAND

SECOND OPENING PAPER

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OUR forefathers in America were interested first of all in freedom; hard work and plain living did not worry them, neither did insecurity due to natural causes, or to hostile Indians, deter them from taking all the risks involved in acquiring a maximum of economic independence and freedom from control by others. Under these conditions, concepts of private property in farm land developed, which were more nearly absolute than have been found in any place in the world.

Along with this conception of private property came the American ideal that every farmer should own the land he tills. There have been tenant farmers in America since early Colonial days, but these were as a rule younger men, willing for a time to submit to the supervision of landlords but expecting some day to own farms with freedom to farm the land as they pleased. It is true also that the concept of freedom held so dearly by the colonists did not extend to their servants, particularly the African slaves, but in due time the concept of freedom was so strong in the north that even the slaves in the south were set free; the conditions resulting, however, from the African slave trade still dominate the tenure problems in the Old South.

From this drive for freedom, the people of the United States have apparently turned aside. A new generation has arrived on the scene that knows not the soreness of soul that came to their ancestors because of unfreedom, but is sore because of lack of security. There is, therefore, a strong tendency to trade freedom for security. This may be the beginning of a trend towards a new form of feudalism—certainly not a return to any form of slavery. Our interest in this subject on this occasion arises out of the new trends in land tenure.

The major problems of land tenure are problems of human relations. It is true that the conservation of the soil for future generations is important, but this can best be assured by adjusting the human relation of the farmer in a manner which will lead him to

think of the particular land which he tills as the source of well-being of his children and grandchildren.

The human problems of tenancy have in the past focused upon three points: fair rent, security of tenure, and freedom to farm in accordance with the operator's best judgement. With regard to these focal points of interest the pendulum has swung far in one direction, and now seems to be swinging back. Through the centuries the unfreedom of feudalism and the security it provided gradually receded into the background, and freedom stepped boldly forward as a major desideratum in the modern world, but now we have apparently entered a new epoch in which the marginal utility of freedom is on the wane. It is not clear, however, that any one wants less freedom for himself. Rather it would seem that many desire less freedom for others in the interest of greater economic efficiency of these 'others'. The motive of the promoters of this unfreedom seems unselfish when tested in terms of economic goods, but the motive will bear investigation from the standpoint of the will-to-power of those who desire to put the farmer under strict control in order to ensure to him a better economic standard of living. It is a question of the relative valuation placed upon freedom on the one hand and the promise of objectively guaranteed economic security on the other. We have fought our way from bondage to freedom. With freedom has come insecurity. How much freedom should the farmer sacrifice for the promise of security through objective control?

In the rental contract may be found either security on the one hand or control with unfreedom on the other. Fairness of the rental contract does not turn solely upon the amount of rent to be paid for the use of the land. The terms on which the lease may be brought to a close are often of primary importance in determining the quality of the husbandry and the well-being of the farmer and his family. Compensation for unexhausted improvements and compensation for disturbance, with the possibility of adjusting the annual rental payment in case of a series of bad crop years or changes in marketing conditions, put the good farmer in a position to farm well without danger of losing his capital through excessive rents or forced shifts from farm to farm. With highly competent tenant farmers freedom results in better farming and may give the possibility of better returns for the landlord even though he finds his authority over his land on the wane; but with ignorant, incompetent farmers the competent landlord can make a large contribution by participating in the management. The half-century prior to the World War brought great progress in British land tenure in which the rights of

the farmer continually grew, especially with respect to compensation for unexhausted improvements and for disturbance. In some measure the rights of the British landlord were encroached upon, but in part the improvements were in the interest of the landlord as well as the tenant.

In the United States there is to be found the beginning of compensation for unexhausted improvements. This takes the form of payment for grass seeds sown during the last year of the tenancy and for the work of manure hauling, or ploughing, from which the outgoing tenant has received no benefit. The idea of compensation for improving the land or compensation for disturbance has not made much headway as yet in the United States.

The idea that the tenant should be free to farm in accordance with his own ideas has not taken root in the United States. There is greater freedom where a cash rent is paid than where the land is worked for a share of the crop, but in either case the landowner has always maintained primary control of the use of the land.

There are many competent tenant farmers in the United States capable of taking the full responsibility for the successful operation of a farm, but there are also vast numbers of ignorant and relatively incompetent tenants and croppers with whom good farming would be impossible without the strict control of the landlord. Croppers quite generally work under as close supervision of the owner of the land as if they were wage workers. They are essentially hired hands working on an annual basis. They receive advances on which to live during the year and are credited with the price of a share of the crop when it is sold. In fact they often work for the landlord on a wage basis when their crops do not demand their attention. From this status it is possible for the most industrious and thrifty farm families to rise to the position of tenant farmers, owning the essential equipment for operating the farm on a self-directing basis in accordance with a stipulated cropping programme agreed upon by the landlord and the tenant. From the tenancy stage it has been possible for some of the farmers to rise to the position of mortgaged owners free to farm as they pleased, but at the present moment there is a trend toward less freedom on the part of the mortgaged owner.

The United States Government has taken a positive lead in the movement to create something less than a fee simple title to land under which the mortgaged occupying owner is subject to supervision covering the details of the farm and home activities. The farmers on farms purchased under many of the Tugwell Resettlement projects, as well as on the acquisitions under the Farm Tenancy Act,

are subject to management control for a period of forty years. Insurance companies and other money-lending agencies are also commencing to exercise control over the management of the farms on which they place mortgages.

Absentee landlords are much more numerous than formerly in the United States because of foreclosed mortgages, but this has not necessarily left the tenants without supervision. Management companies have sprung up which provide supervision for these farms on a fee basis; as a result many of them are better managed than those owned by local doctors, lawyers, merchants, or even retired farmers.

The insurance companies have been giving a lot of attention to the management of the hundred thousand or more farms which they own. Likewise, the Federal Land Banks have found it necessary to develop a farm-management agency to give supervision to the thousands of farms on which the mortgages have been foreclosed. Thus, both from public and from private agencies has come a tremendous impulse to increased control of farm management on rented farms and on mortgaged land.

The rehabilitation work of the Farm Security Administration has led to an extensive movement to improve the relation between landlords and tenants. There are more than five hundred thousand farmers who are receiving loans from the Farm Security Administration. A comprehensive system of supervision has been set up for the farm, the garden, the home, and the health of these tenants and their families. In this work 3,774 men and women are now employed as Government supervisors.

'The latest records available show that there are 2,443 County Farm Supervisors and 1,005 County Home Supervisors. In addition to these County Supervisors, there are 177 District Supervisors and 149 District Home Supervisors. As of June 30, 1938, these people were handling 315,622 active standard rural rehabilitation cases, 200,984 active emergency rehabilitation cases (the emergency loans are not based on complete farm and home management plans and do not require the same degree of guidance and supervision as do the standard cases), and 57,067 emergency grant cases.'

This supervision touches the landlords as well as the tenants by influencing the making of rental contracts for those who receive loans from the Farm Security Administration. The Flexible Farm Lease which is being aggressively promulgated by the Farm Security Administration of the United States Department of Agriculture has many excellent points. It provides for a clear statement of the relation between the landlord and the tenant, and it provides for

compensation for unexhausted improvements, but this contract, like most others in use in the United States, provides for a rather strict control by the landlord of the management of the farm. Furthermore, it provides for the acceptance of the Government agricultural programme in so far as it is applicable to the farm in question. Thus, it is clear that *freedom-to-farm* is not on the cards for the tenant farmers operating under this contract. Doubtless any student of the question will readily agree that most of the farmers benefiting from rehabilitation loans are not well fitted for taking the full responsibility for successful farm management. On the other hand, some question may arise with regard to the promulgation of the Farm Security Administration lease for general use among farmers who possess greater ability as managers.

In addition to this control of tenant farmers and mortgaged owners there is the new element of control which comes with the Agricultural Adjustment Administration. This control reaches the owners free of debt as well as mortgaged owners and tenants. Participation under the Act is said to be voluntary, but participation becomes economically impelling, particularly when quotas have been voted. Thus the whole farming programme of the United States is more and more subject to outside control, and less and less left to the free will of the farmers.

Another stage in the drama of land tenure in the United States may be upon us. The granting of a 'corn base', a 'cotton base', &c., seems a relatively simple procedure in the system of production control. Likewise, the 'milk base' used by the associations of dairy farmers in many of the city milk zones has proved a useful method of compensating farmers for producing a continuous supply of clean milk for city consumption. But this new development has in it the possibility of seriously modifying property rights in land. As the right to a 'base' becomes secure and subject to sale separately from the land, as is true of the 'milk base' in certain areas, a part of the property right adheres to the base and not to the land, just as the value of water-rights for irrigation is clearly distinguished from the value of the land. Thus a part of the value of real estate may be transferred to an intangible property which arises out of the system of control.

These intangible property rights attaching to 'bases' have something in common with the property right which the workers in certain occupations claim in their jobs. It is usually true that 'property rights' of this kind have value because of an element of monopoly privilege based upon artificial limitation of competition.

Hence, with the decline of the competitive régime, property rights of this kind may become more and more significant. In fact, the future evolution of property rights in *bases* and in *jobs* may have a profound influence upon the whole social order and shift our interest from land tenure to artificially created opportunity tenure.

Thus we find the control of farming and the property rights in farms in a state of flux. In this flow, evolution or devolution, there seems to be a passing of freedom-to-farm with the hope of an improvement in the security of tenure and possibly an improvement in the incomes of working farmers. It is possible that more than half of the farmers of the United States would produce more under superimposed management than when left to manage for themselves. There remains the question: 'Is this possible extra production worth the sacrifice of personal liberty?' It must not be overlooked that freedom is still highly prized. Many people will readily sacrifice a part of the potential economic income in order to enjoy the psychic income arising from being one's own boss. Is it in the public interest to use the power of the Government to force a man to sacrifice psychic income for economic income? To the view that 'It is in the public interest so to direct the farming at the present time that the oncoming generations may have greater appreciation of the economic values and of the importance of bending one's own will to the economic forces, rather than freely following one's whim', it might be rejoined that the qualities of the future generations of farmers might be improved by genetic methods quite familiar in animal husbandry, but here again the personal liberties and psychic income of many people would be sacrificed to an end that would not appeal to them.

When all the possible means of improving the qualities of men and their actions have been reviewed, it will, I believe, be found that for the improvement of all individuals above the level of criminals the gradual educational process with the maximum of freedom of action consistent with the general welfare is the most effective. The term 'education' as here used includes not only the results of schooling, reading, public lectures, &c., but also the improved understanding of the forces in one's environment, which comes through experience. To be educational, experience should arise from efforts largely self-directed.

The educational method seems slow and expensive to the reformer who thinks he knows what to do and wants to do it now, but in the end it will prove least expensive and most effective. For certain persons who might be selected from the lower end of the

human column, slavery as it was known at its best in Virginia and Kentucky would give greater efficiency, greater economic security, higher living standards, and more cultural advantages than these people can secure through freedom. It does not follow, however, that their total satisfactions would be greater, and it is all but certain that evolution to higher position in the human column would be less likely.

These lines of thought leave one's mind filled with doubt with regard to the ultimate value of trends in agriculture which put the farm and home activities of the farm family under detailed control.

Fifteen years ago, when the agricultural outlook reports of the United States Department of Agriculture were in the early stages of their development, differences of opinion arose among the men of the Department with regard to the attitude to take toward the farmers. Certain men believed the thing to do was to draw the picture as clearly as possible and leave it to the farmer to decide what to do in the circumstances. Other men took the position that this method, while more highly educational, was too slow and that the thing to do was to tell the farmers what they should do in the circumstances. It would appear that the latter point of view has prevailed, particularly since the Agricultural Adjustment Administration gives it effectiveness. In the long run, is it the better way?

The questions may be raised: Is more good than harm being done by all this exercise of control over farming by Government and private agencies? Is the right attack being made? Will the new methods guarantee fair charges for the use of land? Will they bring security of tenure? Put more concretely, will the new controls tend to bring land rents and land values to a level which will give the tenant farmer a chance to earn a living and also enough to make the first payment on a farm? Will land prices be brought to a level such that the interest, taxes, and repairs will not exceed a fair rental charge? There does not seem to be anything in the new régime in the United States which will yield a satisfactory solution to the problem of excessive land prices and thus remove one cause of insecurity due to foreclosure of mortgages because they are too large. Shifts from farm to farm due to the foreclosure of mortgages have been very numerous and are far more disastrous to the farmer who moves and to the land than are the movements from farm to farm of tenants and croppers. The whole system of mortgage indebtedness tends to support land prices on too high a level because of the public interest in maintaining the value of outstanding securities whether they are held by private or Governmental agencies. This

situation has been mitigated in a measure by artificially reduced interest rates of $3\frac{1}{2}$ per cent. on the Federal Farm Loans, and of 3 per cent. under the Farm Security Administration. But low interest rates do not solve the problem of paying the excessive principal sum of the debt incurred when a farm is purchased. With farm prices based upon the earning power of the land subnormal interest rates would not be called for. This problem of the price of farms has been neglected.

Not only is the central problem of land prices in their relation to the earning power of the land being left on the side in the United States, but tremendous expenditures are continually being made which stimulate an increase in the numbers of farmers who compete for the use of farm land. In certain parts of the United States it is too easy to commence farming, and hence there is too much competition. For example, in certain cotton and tobacco areas a young man with practically no capital can get married and secure a position as a cropper with living quarters furnished and food supplies advanced to him until the first crop is raised. This enables a young couple to commence raising a family before having acquired and demonstrated the skill and thrift essential to rise to a position of independence. Would it not be far better if these young people should remain unmarried, and both work for wages and live as members of farm families, until they acquire adequate skill and have saved enough money to start farming on a more independent basis than that of a cropper?

The United States Government is contributing through the Farm Security Administration to the excessive competition for the use of land. Farmers who have failed to meet the requirements for success in this highly competitive field are encouraged to re-enter farming by being given special privileges with respect to credit and managerial assistance. Would it not be better if some of the expenditures laid out by the United States Government, in an effort to place the down-and-out farm people on farms, were used to lead them into other occupations? It is true that the present control of entry into many occupations make this difficult, but there are still many open occupations besides agriculture, and is it not a function of government to maintain equally open doors into the various occupations? Taking things as they are, more rural tradesmen are needed. The city rates for masons, carpenters, plasterers, plumbers, and electricians are beyond what the farmers can pay out of the prices they receive for their products. At city rates vast amounts of potential work will go undone in the rural areas. The rates charged by rural

tradesmen can be less than half of those now charged by city tradesmen, and yet pay better than farming. Automobile repair shops for rural people are needed, and there is a dearth of paper-hangers and painters and other service tradesmen available for rural people at rates of pay comparable to the earnings of farmers. The Government would be helping to solve the farm problem if it were running schools for rural craftsmen and even lending them money for the purchase of equipment, instead of drawing all the potential craftsmen into the excessively competitive occupation of farming.

It is not my purpose to imply criticism of those responsible for the administration of the emergency programmes affecting agriculture and land tenure in the United States; the intent is rather to stimulate thinking which may lead to the development of wise, long-time national policies with respect to the economic well-being of all of the people.

There are many broad general economic questions which relate in an important way to the problems of agriculture and land tenure. The stability of the currency, the control of foreign trade, and the control of monopolies and prices have much to do with the solution of the problems of land tenure.

The instability of the purchasing power of the dollar throws a vicious element of speculation into land values; fear of inflation has led thousands of men who have no personal use for farms to invest in farm land. Many a bewildered business man has said in recent years: 'I am going to have a farm to fall back on; even if all else goes to pot, I can at least dig food out of the land.' And thus to the excessive competition for land by farmers is added the competition of the outsider.

The use of the protective tariff to maintain high prices for many industrial products, which could be produced much more cheaply abroad and secured in exchange for farm products and other products which we can produce to better advantage, reduces the market for farm products both at home and abroad, and multiplies the bad effects of excessive competition of farmer with farmer.

The use of a great variety of methods of limiting competition in the fields of manufacture, commerce, and transportation has a profound influence upon the prices which farmers pay for food, clothing, shelter, equipment, and supplies essential to the life and work on a farm. There has been legislation in the United States looking toward the elimination of monopoly prices, but, on the whole, our Government has done more to limit competition and create monopoly price conditions than it has done to control

monopolies in the interest of fair prices to the consumer. This limitation of competition and the resulting limitation of production as a means of securing higher prices for the products of other occupations have led farmers, with the aid of the Government, to restrict production as a means of enhancing the prices of farm products. The effect of this restriction in all fields is to shrink the opportunities and to lower the living standards of all the people. The protective tariff and the industrial monopolies reduce the number of people who may have good opportunities in agriculture without opening other occupations to farm people. The result has been the multiplication of the number of farmers for whom there is no hope of adequate incomes with which to live, to say nothing of the saving of money and buying a farm. The rehabilitation work of our Government may be temporarily justified as a form of emergency poor relief, but it aggravates the tenure problem. The depressed situation in agriculture cannot be permanently cured by the direct attacks through the Farm Security Administration and through the Agricultural Adjustment Administration. The broad problems of population, money, trade, industry, and labour will have to be taken into account as integral parts of the farm problem, if the problem is to be solved.

We should not throw up our hands and say 'It can't be done'. Neither should we turn away because we find the farm-tenure problem a problem in political economy rather than a problem in farm management. The solution will not come in a day. The most effective approach is through the education of all the people to an understanding of the essential interrelations in the various occupations, coupled with statesmanship of a new quality to take the place of, or at least hold dominion over, the private interest pressure group system of politics which has too long dominated our national life.

The starting-point in this undertaking is a better quality of elementary, secondary, and adult education for all the people, and vastly better understanding of political economy and public ethics on the part of all those who hold positions of leadership, whether in public or private affairs. In the right adjustment of the whole economic life of a people will come the solution of the major problems of land tenure.

DISCUSSION

ANDREW STEWART, *University of Alberta, Edmonton, Canada.*

In opening the discussion I would like to express my personal appreciation of the two very interesting papers which have been

presented this morning. I am afraid that my contribution will not match them in either erudition or experience, but I hope that I may be able to provoke some spontaneous discussion from the floor. The first text-book in agricultural economics which I ever looked into was written by H. C. Taylor, and I remember with what difficulty I struggled through the graphical treatment of the tendency to more intensive operation on owned farms than on share-renting farms. I feel it is a real honour to be asked to follow the doyen of agricultural economists in the North American continent.

Property rights in land are associated with three closely related concepts—liberty, control, and responsibility. The State-owned enterprise operated by a manager may be considered as one extreme; private ownership and operation as the other. But, as the opening papers have amply demonstrated, even under the condition of private ownership, individual control may be conditioned by a variety of forms of social control. Some of these social controls operate informally. We have had reference to the effect of the attitudes of people on the use of land. These attitudes have a profound influence on the way in which the land may be used. Other social controls operate through formal organization. Some of these, as has been indicated, are of a voluntary nature. Reference has been made to the activities of the State in the field of technical instruction and in the provision of research, extension, and advisory services. In this case the control is voluntary; the independence of the operator is indicated by his ability to accept or reject the advice; where the advice is accepted the responsibility would appear in the main to rest upon the individual. Again, the State always conditions the control of the individual through the legal framework within which the price mechanism operates. We have had reference to indirect controls of this type, i.e. controls which affect the use of land through their influence on price and profitability. Two other types of formal control are more direct in character. First, the direct legal control of land tenure. It is unnecessary to add to the description of these forms of control presented in the paper by Herr von Dietze. The other form of direct control is the direct legal regulation of the use of land. Legal controls are imposed on the individual; their application indicates the limits of individual freedom; when exercised, where does the responsibility rest?

Now, obviously, a vast variety of combinations of tenure and control is possible. I propose to confine my discussion to two particular situations. First, the transition from advisory control to superimposed management referred to in Dr. Taylor's paper; and,

secondly, the condition of public ownership with private operation. This latter is a condition which I think might deserve some more attention than has been given to it in the opening papers. After yesterday, with its sociology, anthropology, biology, sentiment, emotion, folk-lore, folk-ways, taboos, faith, hope, and charity, I hope that a little economics will not be out of place. I ask you therefore to bear with me while we consider some problems of the economical use of resources under these two conditions.

But first, may I refer briefly to the question of the liberty of the individual? There is, I think, justification for Dr. Taylor's reference to the growing tendency on the part of individuals and groups to assume control and direction of others, but we must admit that there has been a noticeable tendency on the part of the mass of people, farmers not excluded, to evade responsibility and delegate control. The decline in the marginal utility of freedom and the increase in the marginal utility of the promise of security are interesting and observable trends. However, I would like to suggest, although the opinion may not be very popular here, that the concept of liberty involves considerations which the agricultural economist has no special qualifications to assess. There is, so far as I know, no common denominator for freedom and frankfurters.

The tendency to which Dr. Taylor refers, to substitute superimposed management for advisory control, has, I think, not gone so far in Canada as it has in his own country, but there is obviously in certain quarters a growing conviction that increased control and direction would lead to a vastly increased economy in the use of resources. This belief implies that if the decisions which the individual farmer has to make were made for him by some one else—the expert—a much more economical use of resources would follow. Now we may concede that the technical expert has a greater knowledge of the physical bases of production than is possessed by the individual farmer, but much of the knowledge of the expert is of a general nature, and practical problems relate to particular situations. The relative profitability of alternative uses of land depends not upon qualitative generalizations or statistical averages, but upon the particular production functions related to the particular situation, involving an almost infinite number of variables. Knowledge of these, I think, can be acquired only by the process of trial and error in the particular situations.

But perhaps the great danger of control by technical experts lies in the fact that technical knowledge provides no solution for the problems of how much production of different products there should

be; that is, the margin of indifference between alternative uses of land and the intensity of the use of agents other than land. The economist is at least aware of other variables than the physical ones, and his techniques may give him some facility for measuring these. However, there is a definite limit to our ability to measure accurately the values required for the solution of the problems of production. Under dynamic conditions the measurement of change or of its consequences is practically impossible.

The ability to make successful decisions with respect to unpredictable events is a peculiar quality. At present I think it is correct to say that it is more of an art than a science, and there is nothing in the formal training of our diplomaed experts which develops this art. Moreover, this is a difficulty which may not pass, as academic virtuosity becomes tempered by experience. It may be that the leavening of experience results from the responsibility attaching to private ownership of the agents of production, and a personal interest in the profits or losses resulting from their use. That, of course, raises the question of the rationale of private property in its most fundamental form.

But supposing that adequately equipped individuals were available, how far can this form of control be advantageously carried? Here again the marginal analysis applies, but quantitative measurement evades us. It would seem that, because of the importance, with respect to profits, of the short-run and even day-to-day decisions of the operator, control would have to be of an intimate nature. But at what point would the net returns be equivalent to the marginal cost? Further, how much of the added production could be attributed specifically to the making of decisions? Some of it would obviously be due to the carrying of information directly to the farmer, and that part of the increase might be gained through an extension of the advisory services. Again, who will bear the costs of this superimposed management? Will they be borne by the industry? Dr. Taylor suggests that half of the farmers in the United States might produce more under this form of control. He would probably agree that, by itself, this statement means little with respect to economy in the use of resources. If production is increased with the use of the same agents of production, and if the demand for the products at the farm is inelastic, is the State under any obligation to secure for the operators a return on their investment of capital and effort? If so, does this make for the most economical use of resources? If not, what process of transfer of resources will be adopted? It seems to me that in the democracies, if centralized

control is to expand, economy in the use of resources will depend upon the discovery of some painless process of liquidation.

The second condition I wish to discuss may be illustrated by certain developments in the provinces of Saskatchewan and Alberta, which have recently led to some extension of public ownership of agricultural lands. In both provinces the policy is being pursued of acquiring title to lands previously alienated by the Crown. The Saskatchewan Land Utilization Act is intended to apply principally, if not entirely, to land unsuitable for arable farming. Operations under the Alberta Special Municipal Areas Act are wider in scope, aiming at ownership of both arable and non-arable land. In both cases the purpose is not merely acquisition of title but also control of the use of land.

It should be observed that in each province the respective policies apply only within certain areas, and there appears to be no disposition to extend public ownership elsewhere. The homestead policies are still operative with respect to unalienated lands in the undeveloped regions.

Reversion to public ownership is taking place in areas in which public assistance has recently been widely distributed. They are areas characterized by 'normally' low productivity with high variability of climatic factors. This makes for uncertainty which is increased by the highly competitive nature of the possible forms of production, the prices of the products being directly affected by forces operating on world markets. The problem may, however, be somewhat simplified by the restricted alternative uses, namely, extensive cereal production, or grazing, or a combination of these.

The reversion to public ownership has occurred because, under these conditions, miscalculations have led to apparent errors of use, and it is assumed that public ownership is the best means of preventing similar errors in the future.

But it is impossible to absolve the State from responsibility for these errors. The State promoted homesteading on lands now considered to have been submarginal, and the homestead policy tended to standardize an uneconomic size of farm unit. The representatives of the State apparently suffered equally with the individual settlers from inadequate knowledge, or else they yielded against their better judgement to popular demand. It is doubtful if these explanations are significantly different.

During the past thirty years much useful information has been acquired regarding the physical conditions in the areas, greatly advancing the possibility of more orderly development in the future. However, the inability accurately to predict climatic fluctuations

results in a residue of uncertainty, and the dynamic elements remain unpredictable. Hence the definition of the margin, even under static assumptions, cannot be carried out with any precision, and the recognition of dynamic elements precludes any assumption of finality in the margin defined at a point in time.

It has been part of the purpose of the Land Utilization studies conducted under the direction of the Economics Division, Dominion Department of Agriculture, to classify the lands in the affected areas, i.e. to distinguish between non-arable and arable land and to classify the latter on the basis of estimated returns from wheat production. This classification, which involves certain unavoidable assumptions, co-ordinates existing knowledge and may be expected to be of considerable assistance in relation to future land use. Once more this information could be used either, under private ownership, to advise settlers with regard to the relative revenue to be expected from different lands; or, under public ownership, to control the use of land on the basis of such a classification.

The intention to pursue a policy of public ownership seems to rest on the assumption that it will be necessary 'to keep people off the non-arable lands'. But this must imply either that the margin is considered to be rigidly fixed, or that, even with the knowledge now available, the representatives of the State will be more capable than the individuals of judging, from time to time, how far and in what direction the margin has moved.

Supposing that the margin were to remain fixed, the optimum use of resources then depends on its accurate definition, but because of the imponderables involved some uncertainty is unavoidable. Under these circumstances, and where the representatives of the State assume responsibility through ownership and control, there is a real danger that the limits of cultivation will now be contracted too far. This is an insidious type of misuse of resources as it is difficult to establish the existence or extent of error. As long as farm operations were profitable on the arable land, and grazing profitable on the non-arable land, it might be assumed that the optimum use of resources had been achieved. This is not necessarily so if too much land has been diverted to the less productive grazing.

Suppose that the margin of cultivation expands and land previously defined as non-arable, and retained for grazing, could be profitably used for wheat production. Will the administrative set-up result in a rapid recognition of this and permit sufficient flexibility to meet the changed conditions? Or will rigidity tend to further less-than-optimum use?

Suppose that the margin contracts. Certain individuals who have acquired lands, defined by the representatives of the State to be suitable for cultivation, will find that they are unable to obtain an adequate return on investment and effort. What is the responsibility of the State to these individuals? If this condition is expected to be permanent, what process of transfer of resources, if any, will be adopted?

Under private ownership and competition for land, the price of land functions to distribute the available supply between different uses. Under public ownership, in so far as there is any difference in productivity, it would seem to be necessary both on grounds of equity and of the optimum use of resources that differential payments should be made for different pieces of land. In view of the differences in the capacities of individuals, how will rents be determined under public ownership? What use will be made of the economic surplus? Is there any reason why it should be expended in the area where it is accumulated? What process of selection of occupants will be adopted? How will inefficient producers be eliminated? Or will they?

These questions have been raised not because I wish to suggest that under private ownership and competition errors do not arise. I raise these questions for two reasons: first, because I think they help to emphasize the nature of the factors which determine economy in the use of resources; and, secondly, because, unless we can get specific answers to these particular questions, then we are quite incapable of judging the effects of control. Where is control leading us with respect to economy in the use of resources? Careful analysis would suggest that the answer is uncertain. It may be that extension of control is inevitable, but that this should be considered any cause for great optimism seems to result either from a complete failure to appreciate the complexities of the problem, or else from a simple faith that what is inevitable is also desirable. In spite of the great interest and academic excellence of much of the contributions to yesterday's discussion, I am compelled to say that it has done nothing to alleviate the feeling of futility which, it seems to me, must result from any attempt at detached contemplation of current events.

J. D. BLACK, *Harvard University, Cambridge, Mass., U.S.A.*

Dr. Taylor has not dealt broadly enough with his problem by confining it to an apparent opposition between freedom and security. Another important aspect of it relates to economic output. Let me illustrate by an analogy. With the growing use of automobiles

and trucks, we have had a great enlargement of rules and regulations and a development of a large staff of traffic officers. Now obviously, according to the simple primitive meaning of the term freedom that Dr. Taylor mainly uses in his paper, the drivers of these vehicles have less freedom than the drivers of buggies and wagons in 1900. Also following Dr. Taylor's analysis, these drivers, the pedestrians, and the public generally have more *security* of life and limb and of their property in vehicles.

This is about as far as Dr. Taylor carries the analysis. But a much more important aspect of it is that as a result of the new rules and regulations, and the systems of lights and traffic police at intersections, more automobiles are able to travel on highways at one time, and the public arrives at its destination in shorter space of time, than would be the case without them. That is, the output of *travel* has been greatly increased thereby.

This analogy is not introduced to prove anything. Analogies seldom do. Its purpose, rather, is to explain my point about increased output. I doubt if security is the main positive objective of tenure regulations. Rather it is to maintain our agricultural resources in more effective use, and enable our farm people to combine their human resources with the land resources to their better satisfaction and economic effectiveness; and likewise for the nation and society.

Dr. Taylor has chosen to bring in the programme of the Agricultural Adjustment Administration of the United States as a phase of land-tenure control. It certainly has a relation to it. The major object of the programmes of production adjustment now being developed is not so much security as it is a larger *period* output of farm products and more output per worker in agriculture. (Not just a period of a year or two, but over ten to twenty years, let us say.)

I am well aware that these adjustment programmes are always in serious danger of falling under domination of those who would reduce period output by public monopoly restrictions. Some elements of this were introduced in the last Adjustment Act of Congress. But this is contrary to the real concepts of agricultural adjustment. I concede all Dr. Taylor has implied about dangers from private pressure groups.

Dr. Taylor has referred to the monopoly situation in industry. The implication of his remarks is that the proper treatment of this monopoly in industry is to attempt to prohibit it by regulations. Few among those now working on this problem expect any large achievement along these lines. They commonly say that what can be accomplished is worth while; but that it will not go very far.

They look instead to measures of the same general type as those now called production adjustment in agriculture. The N.R.A. was a move in that direction; but a very bad one and woefully mis-conducted. The ends desired must be achieved by positive controls that will maintain production in depressions, and expand it in parallel with increasing efficiency. Legal prohibitions will never produce this effect. Progress along this line will be slow and difficult; but I see no other more hopeful alternative. Nor am I as gloomy about the outlook as Professor Stewart.

Another comment is that the concept of freedom needs to be redefined from generation to generation. Dr. Taylor has employed the same definition of it that prevailed a generation ago.

Dr. Taylor outlined the development of the outlook and educational programme of the United States Department of Agriculture under his leadership in the nineteen-twenties. If the development started then could have been continued in the period from 1928 to 1932 and vigorously pushed, an important part of the excesses of the adjustment programme of 1933 and since would have been forestalled. You will remember that that programme started out with a mere statement of the facts as to the economic situation confronting the various producer groups. Then it began to indicate the adjustments needed in view of these situations. These suggestions at first were very general. Presently they began to be fitted to particular groups and situations. The programme ahead called for adjustment analysis for the important types of farming in all the type-of-farming areas. It was with this programme in mind that the type-of-farming census was made in 1930 under Dr. Elliott's direction.

Dr. Young, of Indiana, one would judge from his statement yesterday, would return to the pre-outlook methods of 1922 and before. Dr. Taylor apparently has never accepted the part of the outlook and adjustment programme that was laid out by Tolley, Wilson, Elliott, and others after he left Washington; or, if so, he has recanted since.

No doubt we shall have something of a reaction to the excesses of 1933 and since. But it will not be to the programme of 1922 and before. It will rather be a return to an extrapolation of the trends in production adjustment in the 1923-30 period—a trend that was temporarily checked by the reactionary measures of the Hoover administration, including no small measure of such reaction even within the Bureau of Agricultural Economics itself.

Dr. Taylor's concern over 'speculative' elements in land values leads me to remark that attitudes towards Henry George's essential

philosophy have changed greatly since I was a graduate student under Drs. Taylor and Ely at Wisconsin. George's objection to scarcity values and insistence upon the need of control of such values bids fair, it would seem, to be accepted into our social system.

L. H. BEAN, *Agricultural Adjustment Administration, Washington, D.C., U.S.A.*

I have four specific points that I should like to raise.

Dr. Taylor stressed the question of freedom versus control, and Dr. Black has given you a popular example in terms of a traffic problem of increased control making for a greater degree of freedom and opportunity. I wonder if Dr. Taylor has been in contact with those several hundred thousand families which he says are under the wing of the Farm Security Administration to discover whether or not those families now do not feel a greater degree of economic freedom even though they are under contractual arrangements with the Federal Government. It is my impression that the controls to which he refers, at least those within the Farm Security part of our Government's activity, actually result in a freeing of a large number of farmers and individuals who have felt themselves completely swamped and submerged by the economic developments of the past generation.

The second point deals with Dr. Taylor's suggestion that much of the federal funds that are used in promoting adjustment operations might more profitably be used to train farmers for other occupations. He cited several suggestions as to where the surplus farmers might look for non-farm opportunities. There are at the present time probably nearly ten million people unemployed in the cities, who are looking for these suggestions of new opportunities and, not finding them, are pressing themselves upon the land. I wonder if Dr. Taylor's suggestions, while theoretically sound and to some extent practical, have real practical significance at this moment when in farming we have a surplus of probably two million workers, and in the cities there are ten million people looking for work in non-agricultural avenues.

The third point has to do with Dr. Taylor's statement that there is a tendency, as a result of our recent farm programmes, for the price of land to be pushed up and the prices of farm products to be pushed down. It is my impression that that inverse correlation between the price of land and the price of farm products is not characteristic of the American farm economy, at least has not been characteristic during the past generation. There seems to be

a positive correspondence between the movement of agricultural prices and the value of land; a sufficiently close correspondence to make it possible to examine that relationship in relation to the questions that Dr. Taylor raises. It is my impression, from having examined these figures, that actually the price of farm land in the United States has in the past seven or eight years been lower than can be justified or explained in terms of the usual relation between the prices of farm products and the price of land. And that leads to the fourth point which has to do with the possible influence on the value of land of the historical bases embedded in the Agricultural Adjustment programmes. If the average value of land has ever since 1930 not responded to the price of farm products, in other words, has perhaps actually been something like 20 per cent. lower than it should have been, then there is no evidence, at least in those facts, that these historical bases are being worked into the value of land and serve to hold the price of land beyond its normal or economic level.

L. C. GRAY, *Bureau of Agricultural Economics, Washington, D.C., U.S.A.*

What I have to say will require very little time. I came in too late at the session this morning to hear the discussion. Just as I arrived I heard the closing portion of Professor Stewart's speech, and I merely want to comment on what was possibly his last point, namely, the possible inelasticity in government ownership of lands, that are at or near the margin, in responding to the fluctuations arising from dynamic conditions, as contrasted with private ownership.

The policies now being followed by the United States Government in trying to deal with the maladjustments that appear to exist at or near the margins of cultivation, which have a certain resemblance to policies being adopted in the Prairie Provinces, are the basis, I believe, for Professor Stewart's apprehension in regard to this inelasticity.

My own impression is that nothing can be more inelastic than the situation that one finds, under private ownership, at the margin. The impoverished farmer is almost helpless to adjust himself readily to these fluctuations. He is under the pressure of indebtedness, and must frequently go on producing at a loss or accept serious recession in his standard of living. Moreover—and this has already been brought out—in these marginal areas, particularly in the Great Plains, as a result of the operation of the Homestead Acts, there

have developed a very unnatural size of holding and types of farm organization, and a widespread dispersion of ownership, which make it all the more impossible for farmers to adjust themselves readily to these fluctuations. What I mean to submit is that it is extremely difficult—it might be possible theoretically, but practically is very difficult—for farmers to weave back and forth between arable farming and range economy. After you get these holdings in types or sizes which have been adjusted, we will say, to arable farming, it would take, under private ownership, a long period of years, especially under the debt structure that prevails in the plains and marginal areas, for the farmers themselves, even though it apparently was to their private advantage, to achieve the types of holdings and ownership pattern that would permit the carrying on of a grazing economy or a mixed economy of arable and grazing. The point that I wish to make is that I believe—and it has been our conviction in developing this policy—that at the margins where this elasticity is particularly desirable it can be achieved much more readily under public ownership, even granting the lack of perception and wisdom and practicality that is sometimes alleged to be characteristic of bureaucrats.

V. P. TIMOSHENKO, *Food Research Institute, Stanford University, California, U.S.A.*

The contribution which I shall make to this discussion is to outline the experience of land tenure in Soviet Russia. In no country have there been such radical changes in land tenure within a relatively short period of time as in Soviet Russia during the twenty years following the revolution of 1917.

The present collectivist system of land tenure did not develop logically from the agrarian relations created by the revolution of 1917-20. During that early period of the revolution the peasants were executing the long-dreamed-of subdivision of large estates among themselves. The peasant movement of 1917-20 completed by way of revolution the process of parcelling large landed properties which had been proceeding rapidly and peacefully for fifty years. In this revolutionary period the Communist party, for reasons of political expediency, followed a purely opportunist agrarian policy not at all corresponding to the principles of the Marxian economic theory. Even the formulation of the earlier agrarian laws (of 1917 and 1918) for Soviet Russia was left by the Communists to their theoretical opponents—the left wing of the socialist-revolutionary party, with whom they created a united front in order to

win the revolution. Although always in favour of large-scale enterprise in agriculture, the Communist party in the earlier period of revolution followed for political reasons a policy of parcelling large estates and equalizing peasants' land holdings. The policy of equalization was pushed to its extreme, since the Communist party always relied politically upon the poorest strata of the peasantry and on agricultural labour. It incited these groups against the well-to-do peasants who were regarded as the class enemy. This was particularly so in those parts of the Russian empire where the civil war continued longest, as in Ukraine and the Cossack areas in the south-east.

The Communist party formulated its own agricultural programme, favouring large State and collective farms, in the early decree 'on the socialistic organization of agricultural production' promulgated on February 14, 1919. But it could not make this programme effective at that time. Practically all agricultural land was then held in fact by the peasants, and the Government controlled only 3 to 4 per cent. of the arable land.

Finally, in order to put a stop to further redistribution of land, and to create a measure of security of land tenure that was badly needed for the recovery of agricultural production, the Soviet Government by the Land Code of 1922 recognized the *status quo* of the agrarian relations created by the early agrarian revolution. This code assured to villages and other agricultural groups the perpetual tenure of all land actually in their possession on the date of the proclamation of the law. The law of 1922 did not impose on the peasants in the villages new forms of land tenure favoured by the earlier decree concerning socialistic organization of agriculture—that of February 14, 1919—but gave equal standing to all previously existing forms of land tenure, including individual holdings in closed fields which had been particularly favoured in the Stolypin agrarian reform of pre-War years.

At the time when the law of 1922 was promulgated, the Soviet Government decided to rely on peasant farming as the source of the agricultural products so necessary in the national economy. It decided not to intervene unnecessarily in agrarian relations, allowing the peasants to select such forms of land tenure within the villages as best served their purposes. The Land Code of 1922 was in this regard the most liberal land law of post-revolutionary Russia.

It is true that the Code decreed that all land was the property of the State, and that such transactions as purchase, sale, or mortgage of land were forbidden. But the leasing of agricultural land, as well

as the use of hired labour in agriculture, was permitted, though not without limitations. These had been forbidden by earlier Soviet laws.

In actual practice the leasing of land and the use of hired labour in agriculture went considerably beyond the limits fixed by the Land Code of 1922, and in 1925 the Government recognized the situation by permitting long leases of twelve years and more, and by exempting agricultural labour from the strict rules of labour legislation.

Generally speaking, during 1922-6 the land law as well as administrative practice left considerable latitude for the development of peasant farming in Soviet Russia. If there was any period of rapid agricultural recovery in the post-revolutionary Russia, it was this same period. The great war-time and revolutionary loss of crop area was considerably recouped; agricultural practices were somewhat improved; and, through leasing of land and the increased use of hired labour in agriculture, some of the harmful results of the extreme equalization of land holdings during the revolution were partially corrected.

This equalization of peasant holdings had resulted in a great reduction of the land held by the well-to-do peasants who—together with the large estates—before the revolution had been the principal source of marketable agricultural products necessary to supply the cities with food and raw materials. The subdivision of about 100 million acres of agricultural land confiscated from large estates did not increase the average size of peasant farms. On the contrary, after the revolution the smallest farms, unfitted for effective farming, made up a larger fraction of the total number than before, and the number of well-to-do farmers operating efficient farm units was greatly reduced. This was one cause of the difficulties experienced by the Soviet Government in supplying cities with agricultural products. But the recovery of agriculture during the period of the New Economic Policy, 1922-7, was accompanied by an increase of production for market by the better class of farmers, and this relieved the shortage of food in Russian cities.

A sincere continuation of the agrarian policy proclaimed by the Soviet Government in 1921-2 would presumably have resulted in further recovery of peasant farming and improvement of agriculture. But it would also have meant an increase in the importance of the well-to-do strata of farmers, of so-called 'capitalistic' farmers. This was regarded as undesirable by the Communist party. Consequently, various measures were taken aiming to prevent the growth of the well-to-do group of peasants—called 'kulaks' by the

Communists. Their farms were subjected to confiscatory taxes, they were hampered in obtaining credit and in purchasing machinery, and, finally, they were excluded from co-operative societies and from the land communities controlling their land holdings. All this, coupled with the policy of low prices for agricultural products, left well-to-do peasants without interest in, and deprived them of the possibility of, further development of their farms. This policy slowed up agricultural recovery and led to open conflict with the peasants in 1927-8, and in turn the Government encountered new difficulties in procuring the agricultural products, particularly grain, necessary for the city population.

The political conflict determined the subsequent agrarian policy of the Soviet Government, which finally resulted in complete reorganization of land tenure on socialistic lines. In an effort to make itself independent of the well-to-do peasants who produced the larger part of the marketable products, the Soviet Government launched its ambitious project of huge state grain farms, and proceeded also with rapid collectivization of peasant farms. In this way it sought to combine individual peasant farms of small size into relatively large collective farms.

In 1927-8 and 1928-9, however, the Soviet Government still contemplated the possibility of an evolutionary rather than a revolutionary change in the land-tenure system from millions of small individual subsistence farms to a limited number of large collective farms. The process of collectivization was still regarded as relatively slow and as voluntary. Under the first Five-year Plan less than 15 per cent. of the total number of peasant households and no more than 20 per cent. of the arable land were planned to be in collective farms by the end of the five-year period in 1932-3. But during the winter of 1929-30 the Communist party radically changed its tactics. A new agrarian revolution replaced the programme of relatively slow agrarian reform. We call it the second agrarian revolution, organized from the top by the Soviet Government, since in its course the new form of land tenure—collective farms—was forced on the peasants rather than accepted by them voluntarily. This second revolution meant pure confiscation of land and other property, in part or in total, for about a million peasant households which qualified as 'kulaks'. Their land was given to collectives, while they themselves were not permitted to join the collectives.

I have said that the principal reason for this radical agrarian reorganization was political. But there were also economic reasons. By organizing collective farms the Soviet Government expected to

create large agricultural enterprises which, according to Marxian theory, would always be more efficient and productive than small peasant farms. The second revolution, which forced the peasants with their small holdings into collective farms, was thus a reversal of the process of parcellization which prevailed in the first revolution of 1917-20.

Furthermore, the replacement of millions of small subsistence farms by a smaller number of relatively large collective farms which in turn were controlled by only several thousand purely State organizations, the so-called machine-tractor stations, facilitated centralized planning of agriculture by the State. The State was already directly planning and administering other branches of the national economy. Here we have an example of the inevitable spread of centralized planning from one section of the national economy to other sections, even when centralized planning of these others is difficult to organize.

Soviet Russia's experience in social control of the use of land, which found its extreme expression in the present collectivist system of land tenure, also shows that such control logically develops into more and more centralized forms. In preparing a new and radical change in land tenure on socialistic lines the Soviet Government proclaimed in 1928 that land was the property of the U.S.S.R. and not of the independent republics composing the nation, as it had been under earlier legislation. At about the same time a Federal (Union) Commissariat of Agriculture was organized, and this Commissariat took over from the Republican Commissariats the guidance of the socialistic reorganization of agriculture as well as agricultural planning.

It would occupy undue time to describe the development of the second agrarian revolution dating from 1929. It suffices to characterize concisely the system of land tenure created by this revolution, and its effect upon agricultural production and the situation of the farm population.

By the spring of 1933 nearly two-thirds of the nation's peasant households were already in collectives and nearly three-fourths of the arable land was in their possession, instead of the 15 and 20 per cent. respectively contemplated in the first Five-year Plan. But agricultural production, particularly the live-stock branch but also grain, was so disorganized that a serious famine occurred in many regions of Soviet Russia in 1932-3, and the Government was obliged to resort to extraordinary measures in order to stabilize collective farms.

The measures undertaken in 1932 and subsequently were in some degree similar to those proclaimed in 1921-2. The second agrarian revolution of 1929-32 created not less but perhaps more confusion and uncertainty in land tenure than the revolution of 1917-20. The continuous shift of land between individual farmers and collectives within the villages, among the collectives themselves, and between collectives and State farms, made for extreme uncertainty in regard to the tenure not only of individual farmers whose interests were completely neglected, but also of collective farms themselves. Hence the Government, by the law of September 3, 1932, forbade further shifting of land from one collective to another or from collectives to State farms, and assured to collective farms permanency of tenure of land actually in their possession. But while protecting the land tenure of collectives, the law of 1932 completely disregarded the interests of departing members of collectives; these have no further claim to the land which they brought into the collective, and can be granted only free lands from the State land fund, when such exists.

Uncertainty about the land tenure of collective farms clearly did not cease with the promulgation of the law of September 3, 1932. At least it appears from recent legislative acts and administrative practices that the Soviet Government is endeavouring to impress on the peasants the stability of tenure of their collectives, in order to stimulate interest in improvement of agricultural practices within the collectives. The new (1935) model charter for collectives speaks of assuring the land of collectives in their possession for ever. On July 7, 1935, a special decree prescribed prompt delivery to all collectives of special State deeds confirming them in permanent tenure of their land, and delimiting the exact boundaries of the holdings. Issuance of these deeds was performed with the usual Soviet Russian haste. Incidentally, this haste involved unsatisfactory layouts for a large fraction of the collective farms, and current official reports indicate the necessity of much rectification.

All this indicates that the Soviet Government in recent times has been seeking to create among the members of collective farms an impression of stability and permanency of the land tenure of collectives, approaching the group ownership of land.

But the contemplated permanency of the tenure of collectives *does not mean freedom in the use of land*. In fact, land use by the collectives is so far limited by numerous 'plans' imposed by several organs of the Central Government that not only individual members of collectives but even their managing boards have little voice in land

management. The general system of crop rotation in each collective must be approved by the Commissariat of Agriculture of the U.S.S.R., and every autumn and spring each collective is given plans by the Government for the ploughing and seeding which must be followed. These plans frequently do not coincide with the officially approved rotation, so that considerable difficulties arise. The new Commissar of Agriculture has recently asserted that only about a fifth of the collectives actually follow the approved systems of rotation, and that in many of these the systems need to be revised to fit the circumstances.

This illustrates the contradictions and suggests some hesitancy in the Governmental agrarian policy in recent years. On the one hand, it is sought, through assuring permanency of land tenure to individual collectives as well as by taxing them in kind at rates specified before harvest, to stimulate the interest of members of collectives in improving their farming practices and enlarging their output. But on the other hand, through minute control and continuous and excessive intervention in management and by arbitrary low pricing of products, the Government strangles the interest of members of collectives. Hence it is doubtful whether the members regard collectives as their own co-operative enterprises created for their own benefit, or as State organizations created for the convenience of the Government in controlling agricultural production in the interest of the State.

This must generate instability of the present collectivist system of land tenure in Soviet Russia, and one cannot be sure that it would survive if the peasants should become more free to decide their own affairs. It is quite possible that a new revolutionary reorganization of land tenure would take place in Soviet Russia in such case and lead to disappearance of the collective farms. One of the principal causes of this instability is *excessive social control of the use of land* and of farming exercised by the centralized machinery of the State, and this control frequently is not in the interest of agriculturists themselves but of the other classes of the country.

Furthermore, while in other countries farmers are sometimes ready to sacrifice part of their freedom in land use in exchange for security of income, the farmers of Soviet Russia have had sufficient experience to know that social control of their enterprises does not mean greater personal security. They cannot fail to remember how in 1929-30 a million 'kulaks' lost their land, in part or in total, without permission to join collectives; or how in 1932-4 several hundred thousand members of collectives were evicted for one

reason or another, losing their land and their other property; or how during the past year the 'purging' of collectives has resulted in such numerous and arbitrary evictions from collectives that the Central Government itself was obliged to intervene. Social control of agricultural enterprises and the use of land in the extreme forms in which it exists in Soviet Russia does not guarantee the security of individual farmers. On the contrary, it may frequently sacrifice their interests to objectives which seem more important to those who are in control of the State.

It is my impression that, in the reorganization of Soviet agriculture on collectivist lines, the Government was guided mainly by mechanistic principles, with neglect of the human element of farming. The purpose was to create large farms, convenient for the use of tractors, combines, and other modern machinery; to group them in a limited number of still larger units under the control of machine-tractor stations; to hold the machine-tractor stations directly under the control of the Central Government; and so to obtain control of the agricultural production of the largest country of the world. In the execution of this scheme the Soviet Government was in some degree successful. Some 25 million small subsistence farms, with an average crop area of only a little more than 10 acres per farm, were in a few years supplanted by a quarter of a million relatively large farms with an average crop area a little more than 1,000 acres—larger than this in the prairie area of the south-east. These large farms were grouped under some five to six thousand machine-tractor stations controlled by the Central Government. In addition, some four to five thousand huge State farms were created. This scheme appears perfect from the mechanistic point of view of the Communist economists, who deify machinery, and also to some extreme partisans of agricultural planning. But it is a scheme that fails to take into consideration many organic processes of the greatest importance in agriculture, particularly the human element of farming. In Soviet Russia machines were not adjusted to the needs and conveniences of farmers, but all agriculture and particularly the whole system of land tenure were reshaped for the convenient use of machines, and with neglect and frequently direct sacrifice of the interests of many millions of farmers. As yet the system has failed to yield even the mechanistic results that were expected. How vital it is and how long it will survive without radical reorganization, are problems of the future. But it may be said now that although insufficient social control of land use may cause difficulties and requires correction in some countries, there is no doubt that social

control in the extreme form practised in Soviet Russia may be even more harmful to farmers, and can by no means be counted upon to assure them of economic security. For the United States or Canada to frame social control of land use on the model provided by Soviet Russia would be to invite damage rather than improvement.

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As Dr. Taylor has so well pointed out, we in the United States have passed through a period of economic freedom, during which farm ownership existed for the man who would accept and improve a homestead, into a period of growing antagonism towards landlordism and other problems which, in the minds of some people, may challenge the soundness of our theories and development with respect to private property in land. These new reactions invite close scrutiny. They seem to have developed within the last two decades out of the long-continued agricultural depression. Such antagonism did not develop while the road to land ownership was a smooth one. Less than twenty years ago many thoughtful tenants said they preferred to be tenants rather than farm-owners at existing prices of land, and as a matter of fact in some areas many tenants still hold this view.

In the brief time at my disposal I wish to emphasize two or three aspects of our land-tenure problems which pertain to the meeting of current problems. Our land-tenure problems are going to be difficult to solve in the first place because of widely varying conditions in different parts of a large country. Some well-intentioned people are attempting to see land tenure as one big problem of which a solution if found for one part of the country would provide the answer for other sections. Land-tenure problems change with the age of the agriculture of the region, the shift from one type of soil to another, the relative productivity of land of the same soil-type, the shift from one class of people to another, and many other aspects which make the problem a continually shifting one and one which is not easily handled for all sections of the country under any generalized programme. The problems created by cropper tenancy in the south, where the soil is subject to erosion twelve months out of the year and where a single-crop system of farming is followed, are problems of a much more acute nature than those in an area like the better parts of the Corn Belt.

Conditions seem similar throughout the Corn Belt where there is a greater variety of crops grown and where soil erosion is not so apparent. We need to recognize, however, that we have, within the

Corn Belt, areas which are rapidly deteriorating, while there are other areas which are still producing maximum yields and promise to continue to be highly productive for many years to come. In the Corn Belt, then, we have areas where, because of soil depletion, land values have receded and farms are even becoming smaller as a direct result of a waning agriculture. Under such conditions maintenance of the land on a profitable productive basis may be impossible with a system of private property in land. On the other extreme we have highly productive land where tenants realize that the more land they operate the more money they will make up to certain limits. In these latter areas there is an urge to increase the size of the farm unit in order to use more economically a full line of modern farm equipment. It is not uncommon for some tenants in the better land areas to have as large an investment in their equipment, live stock, and other operating capital as many owner-operators had in both land and equipment less than half a century ago. Under these conditions many tenants freely express a preference to remain tenants on highly productive farms rather than to use their limited capital for the purchase of a smaller farm to own and operate. Not infrequently some of our tenants on the larger farms are becoming owners of the smaller farms which they are renting to other persons, but with the intention of retiring to the smaller farm at a later date.

The tendency towards larger farms, which is a direct outgrowth of mechanized farming, is creating one of our serious current land-tenure problems in that it is forcing many tenants off the land, or it is holding back the young man who desires to become a tenant. A series of meetings held throughout central Illinois verified the seriousness of this problem. Tenants in many instances were being forced to sell equipment, and young men were complaining of the lack of opportunity of becoming established as tenant farmers. Specifically, there has not been much change in the number of farms in Illinois within the past twenty years, but the trend has been towards more small units adjacent to our towns and an increased number of larger commercial farm units away from population centres. Because of the current shift, it will require another census period to show clearly what has been taking place during the past three or four years. These comments relative to varying tenancy conditions are offered merely to warn us against accepting any single proposal as a solution to all land-tenure problems in the United States.

Dr. Taylor has given us a fine generalized picture for the country from a practical point of view, but the emphasis upon the need of education to correct the situation is rather a vague approach in the

face of certain existing problems. Those of us who have been closely associated with extension work, working with farm people, credit interests, and varied other interests pertaining to agricultural welfare, get discouraged at times with the slow progress which education makes in spite of what we would like to regard as a thorough system of agricultural extension.

While there is much truth in Dr. Taylor's statement that 'the major problems of land tenure are problems of human relationships', it would appear to one who is following farm experience rather closely that it would be more correct to add 'and the human relationship to the land'. Education can hardly be relied upon to ensure that the owner of the land with his present personal desires will protect the interest of future landowners by giving proper attention to the soil. The owner of the land too frequently is more interested in the current income from the land than he is in the protection of its future productivity. While not limited to the older landlords, many of whom are well qualified, one need only point out that in heavily tenanted sections of the Corn Belt the average age of landlords is above sixty years. Even where a good relationship exists between the landlord and tenant, many tenants appreciate the fact that there is much doubt as to how long they can remain on the farm because of the age of the owners. Therefore they do the natural thing of looking out for their own interests first rather than protect the future productivity of the land. Whatever may have been the experience of other countries in regulating the use of land, it seems pretty well established that in the United States irreparable damage will be wrought upon a great deal of the soil, unless the relationship between the landlord and the tenant is such that the future productivity of the soil is maintained. Society will undoubtedly be confronted more and more with the problem of protecting the future usefulness of the soil.

Few people appreciate that the margin between good and poor farming in the same community on land originally having like productivity is rapidly growing wider. In most communities farms may be found where many improved practices are being followed. On the other hand, it is a common statement that there are certain farms in most communities on which tenants habitually fail because the owners have failed to carry on a system of farming which would maintain the productivity of the soil. The less-fortunate tenants who are unable to locate themselves on good farms fall victims to the insecurity of badly depleted farms, where there is little opportunity for them to meet the costs of production after giving a portion of

the products to the landlord. As yet few people appreciate, in drawing up farm leases, that distinctions must be made between farms in the same community. They do not recognize that it costs just as much and perhaps more to operate land of low productivity, resulting perhaps from a half-century of poor management, as it does to operate land capable of producing twice the crop yields. Reimbursement of tenants for unexhausted improvements, while coming to have an important place in our agricultural economy, is an inadequate solution for some of our current problems.

Dr. Taylor's plea for an educational approach to land-tenure problems has special application to the teaching of better farming practice. Education for good farming is badly needed by the majority of landlords past middle life, because they think of their farm holdings as they knew the farm intimately twenty to forty years ago. This is true especially of the absentee owner whose main interest has been in some professional line far removed from farming and who has renewed his interest in agriculture when he inherited the home farm. His most normal reaction to low income is that the tenant is at fault, and he does not recognize that the productivity of the land has been badly depleted during the latter years of the preceding generation. This is one of the most needed educational approaches and yet one of the most difficult to meet. Good farming is still the key to the most difficult of our land-tenure problems.

With reference to the questions Dr. Taylor has raised whether our current agricultural programme will lead to the right land use or whether the property rights of the individual may be too seriously curtailed, it may be worth while to call attention to the fact that we perhaps have never developed the intensive margin of our agriculture in the way which is justified. The whole history of the United States has been one of expanding to new territory and casting off the less-productive land as it was passed by. As we found markets for increased products, we expanded to new territory. Any successful federal policy, therefore, which touches upon the control of production must recognize the greater capacity of some land to produce and to be brought into higher productivity than other land. It would seem uneconomic in the long run if we failed to develop the productivity of our better grades of land to their full economic capacity.

One of the most vital aspects of our land-tenure problems has to do with an adequate system of farm credit. In this problem it seems that, without transgressing too far upon the rights of the individual to control his own property, there is reason for developing the

means of assuring the landowner of greater security. The capitalization of agriculture on a basis that leaves a narrow margin of profit increases the need. Marked progress has been made in the last five years in improving our farm-credit facilities. More mortgages have been made for a long period of years with provision for repayment of a portion of the principal annually. However, not more than two or three credit agencies seem to have made the desired move of adjusting the annual payment of the individual to the current income from the property. It seems even in these instances that not enough attention has been given to adjusting the annual payment to fit the whims of nature. The repayment of principal should be made larger in good years than has been included in the plan of any credit agency, while in years of low income there may be justification for reducing the payment of interest practically to the vanishing-point. Credit agencies will say that this cannot be done because they must have some current income. However, if the Federal Government is seeking to serve society in the best way, it would seem that there might be a logical reason for the Government to serve as an intermediary to help creditor agencies so that they would not force so large a payment on mortgages during years of low income as to bring privation upon the farm family.

At the present time one finds in sections of the Corn Belt unrest on the part of tenants who feel that they should become the landowners. It seems that this feeling is most pronounced in those areas where the largest amount of farm foreclosures has taken place. The source of the unrest probably can be traced to tenants who were landowners until the recent depression years and who feel that if there had been a little more leniency shown on the part of creditor interest they would, during the past three years, have been able to make good their delinquency and have remained owners of their farms with a fair promise of being able to pay off their indebtedness. Here we have an instance where the exercise of the full legal rights of creditors may be forcing a social issue which may react by pressing forward the interest of the landless man.

Dr. Taylor apparently had in mind that private interests have operated too freely in their own interests without recognizing the social and economic problems pertaining to agriculture as far as landownership and the handling of credit interests of the farmers were concerned. At present it is hard to refute the statement some people have made that private property in land has failed in the United States when one considers the many farmers who, within the past twenty years, aspiring to landownership, have found them-

selves caught in the current of the depression, only to lose their accumulations through a rigid credit system which did not give them opportunity to level out their payments to their creditors over a period of years somewhat in accordance with the variation in income which they have been able to wrest from the land. In analysing the problems pertaining to landownership, we must recognize that perhaps the greatest amount of distress has arisen out of the variable income which has resulted from fluctuations in the price-level. The land boom of 1920 in the United States was the culmination of high earnings, while a flood of foreclosures on farms is the result of a depression period with inadequate incomes to meet the current payments on debts. Perhaps Dr. Taylor believes we should educate people in what to expect over a period of years, and to take advantage of the good years to lay by a sinking fund to be used in years of poor income. It might be easier to make the approach towards some stabilization of the price-level, but this expedient seems far distant. However, it should be possible to adjust the annual payment on debts to the income of the mortgaged property.

The more complete our research, the more we are convinced that a great deal of the abuse of land is the result of unfortunate economic conditions. Men who find themselves heavily encumbered postpone improvements and exert themselves to wrest from the land the largest possible income, hoping that by tiding over the period of the depression they will be able to hold their property and later to replace the fertility taken from the soil during years of adversity. This is verified by the growing proportion of the unencumbered owners who are following highly desirable systems of farming, many of which have every indication of being stable from the standpoint of the productivity of the land.

Directors of insurance companies undoubtedly took a lordly attitude in trying to protect the interests of policy-holders during the recent depression. Their experience was based largely on the experience of the early nineties, 1907, and similar depression periods, when they found that, with the inability of men to maintain payments on their farm mortgages, the foreclosure of the property left creditors in a good position in the matter of their asset accounts two or three years later. Many of them felt that they had never lost a dollar for their policy-holders on farm mortgages. This was during the period, however, of the expansion of the country, and not after we had reached a period of maturity with many areas of the country already on the down-grade as far as productivity was

concerned. In connexion with this aspect of the problem, the policy of not letting the former owner of the property continue on the farm as a tenant or as a possible future purchaser has created more than the normal amount of movement from farm to farm. While in many instances this has probably been the best policy, it has been one of the unsettling influences on the thinking of farm people in recent years. It has been one of the factors which has gone far towards disorganizing the social life of communities. Out of it, too, has come the insecurity of tenure, resulting from the desire of the creditor interests to liquidate distressed property at as early a date as possible, without any security of tenure to the occupant of the farm beyond, perhaps, a two- or three-months' notice before the beginning of the crop year. This is one of the factors which are forcing attention on the question of greater social control over farm land.

It is to be expected, however, from the present attitudes of many of these groups that any future depression will find a much more enlightened treatment of the mortgage-holder. If this whole situation were presented properly, for example, to a group of policy-holders in one of our large life-insurance companies, I believe that they would vote against the rapid foreclosure of farm property during periods of extreme depression, the replacement of the owner with a tenant who has less interest than the man who hopes to own the land as a home in the future, and the expense of maintaining a field force to look after a lot of rented property. While foreclosed farms may be considered to be in strong hands, one cannot highly commend the management of the property in comparison with owner-operated property in the same community. The responsibility for the proper handling of property will always be attained to a higher degree under a system of landownership by the operator than under any other form of tenure.

Another element which was well emphasized by Dr. Taylor is that an enlightened tenancy system may provide for the better handling of farm property. Security of tenure is to be desired, and it would seem from a study of farms in the better parts of the country that much is being accomplished towards greater security of tenure. This has come about in part through the professional management of farms. It is to be hoped that the city capital which is going into the purchase of farm land in the heart of the Corn Belt at present may have wise guidance in the handling of the property. As a usual thing these farms are handled much better than those locally owned, or at least those owned by many professional men and others of advanced years. Although Dr. Taylor dislikes regulation, we might

consider retiring men from the management of land, provided their management is detrimental to the future owners of the land, just as we retire workers from their positions when they reach certain ages.

In the development of farm leases, referred to by Dr. Taylor, some individuals are proposing long-term farm leases as one of the major means of improving our farm tenancy situation. Members of this Conference are undoubtedly in favour of long tenure, but we know that it will be successful only when right relationships exist between the landlord and tenant. It seems well proven in some areas that a continuing lease which is automatically renewed from year to year, unless notice is served to the contrary a reasonable period of time before the close of the year, is the best approach to the problem. On the other hand, a long-term lease is altogether unsatisfactory when the landlord and tenant are not suited to each other, and conferences with landlords and tenants reveal no desire for long-term leases.

It is significant to note that Dr. von Dietze in his historical analysis of land-tenure problems came to the conclusion that those countries which aim at agricultural progress will best attain their objectives by creating as favourable conditions as possible for the encouragement of private initiative and competition. Granting that this conclusion, growing out of a much longer experience than we have had in this country, is sound, it would seem that, in order to encourage private ownership and personal initiative, one of the greatest needs in this country is to create a credit system which lends itself to the security of the man on the land, with his financial burden so adjusted that he can tide over unfavourable periods. This will require the avoidance of excessive land valuations as well as the adjustment of annual payments of interest and principal to the level of farm income. It would seem that in addition to not overburdening the farm with debts, there is likewise need of improved systems of farming and of protecting future farm owners through the current maintenance of the productivity of the land. While we would like to accomplish land-tenure improvement through educational means, it seems that as agriculture grows older it becomes more necessary to accept legislative support for desirable adjustments, but it is equally undesirable that legislative action should limit constructive private enterprise.

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My chief reason for speaking on to-day's subject is that Herr von Dietze is not present and, therefore, he cannot give his views on

Dr. Taylor's interesting paper. I think it is particularly important to make some remarks on these statements of Dr. Taylor from the standpoint of Germany, and thus also to supplement the paper of Herr von Dietze.

We can ascertain that the ultimate phenomena, as described by Dr. Taylor, have much in common in America and Germany, but the causes and the relations leading to the results differ in the two countries. Dr. Taylor's starting-point was the principles of freedom and security, and he pointed to the clash between these two principles. 'The marginal utility of freedom falls, that of security rises,' he says. In the field of agriculture it is sought to increase security, and for this purpose sacrifices of freedom must be made.

In this respect the countries differ; primarily, only in degree. I must point out one main difference. Security in a deficiency country needing imports of agricultural products is quite different from security in a country which produces a surplus of farm produce. Clearly, lesser sacrifices of freedom need be made for security of ownership and agricultural income in a deficiency country than in a surplus country. Nevertheless, I must admit that there is in Germany also a tendency to give up some freedom for the sake of greater security of economic enterprise.

Already some years before the War a well-known German economist deprecated this tendency and drew attention to the decline of private initiative with the words: 'The motto of the German is: be faithful; be a true German; and see that you get entitled to a pension.'

The contrast between freedom and security is clearly visible in German economic history when we follow the development of the co-operative movement. The co-operatives made the peasantry fit to compete in modern economy, but, nevertheless, the individualist peasant found it difficult to acquire the true co-operative spirit; sacrifice of freedom for the sake of greater security was required of him.

In practice in Germany, the situation is that the utilization of the soil and the management of the land are free to the fullest extent. Private enterprise and private initiative are free in spite of the highest demands upon land utilization and soil production. These demands are very high, both as to quantity and type of produce. In both respects we impose very great requirements in Germany. We require that the type of production be adapted to the particular needs of Germany and, as to the quantity, that our demand be, as far as possible, met by home production. But the path which we follow towards these high goals is that of free education to correct econo-

mic action, by propaganda, lectures, e.g. on fertilizer application, the best and most suitable breeds and varieties, and many other measures of which I need not speak here as they are generally known. These are all measures for greater production. On the part of the State we have price policies and premiums as a means of directing production into certain channels. But economy is always free. The peasant decides what and how much he will grow. Only as an exception is compulsion found concerning minor parts of agricultural production, such as oil- and fibre-plants, and in the case of certain measures of land improvement. There is further a certain degree of compulsion in the disposal of the products within the fixed scheme of the German Market Order. Here the aim is saving of costs by systematic order, to the benefit of all producers and consumers concerned.

As to the control of land utilization, economic freedom has been maintained to the greatest extent. Farms are placed under control only in the case of over-encumbrance and debt-resettlement with State aid. Otherwise the education of the individual farmer to a sense of responsibility towards the community predominates, as described by Professor Meyer. Then we have the voluntary control to which any farmer may submit, a control exercised by our great accounting agencies, self-governing agricultural organizations, schools, and other bodies.

We always find according to our conceptions that the greatest efficiency can only be attained by free education of our countrymen; we fully agree with Dr. Taylor that this method may be slow and occasionally expensive, but eventually the most effective and in the long run cheapest. I may perhaps refer to a few examples. Several years ago I travelled in Russia. I found that the compulsion exercised there in land utilization and management by no means led to the desired result, the highest possible production; this was clear also from Dr. Timoshenko's speech. One other example can be given from Germany's economic history: In the thirteenth century the Teutonic Order of Knights carried out the resettlement of eastern Germany. The Order gave the peasant settlers greater freedom than they had possessed in the old parts of Germany. Thanks to this high degree of freedom, the State of the Teutonic Order, a typical peasant state, very quickly attained a high economic development and prosperity. After the lost battle of Tannenberg and the fall of the State of the Teutonic Order the peasants were deprived of their rights; this loss of freedom resulted in a continuous economic decline in the subsequent centuries.

This is a clear indication that the highest efficiency can only be attained in a state of freedom. When and where we use compulsion in the field of agriculture in Germany—I have already said that it is only in a relatively small section—the guiding purpose is always education towards yet greater freedom. A well-known German poet has expressed this with the words:

‘Freedom is the purpose of compulsion; as we bind the vine that it may gaily grow on high instead of trailing in the dust.’

Also, as to changes in ownership, although in the more recent developments they have attained considerable proportions, particularly in eastern Germany, as a rule the method of freedom has been adhered to. Compulsion was only used in exceptional cases; here I might mention the Reich Settlement Law of 1919 and its execution, and the Reich Law of Hereditary Farms of 1933. Peasant settlement has been promoted by the State, and in recent developments we have created more than 50,000 new peasant holdings; but the State loans must be repaid. Repayments are made on the *Rentengut* system.

In Germany, too, we have the important problem of a just economic balance between the economic groups. A solution is sought by the Market Order and fixed prices. We strive to find a just price which covers the costs of the farmer and gives him a social status comparable to that of the other professional groups. I would like to emphasize that before the War, when we had the free play of economic forces, this aim was not attained, and we hope that our present measures will enable us to reach this goal.

I trust I have shown that while the conditions are different in the two continents, ultimately there are clear points of contact, and similar endeavours are to be found in all countries.

SAM HIGGINBOTTOM, *University of Allahabad, India.*

India seems to be a very long way off from this discussion. Yet the subject is ‘Land Tenure and the Social Control of the Use of Land’, and it seems as though we have nothing else in India but this. You will find every known system of land tenure somewhere in India. Madras, an area of 142,000 square miles with a population of 40,000,000, has what is known as the *Metzra* system. The Government owns the land, and the cultivator is directly the tenant of the Government.

In Bengal there is private ownership of land, but they have there what is known as the permanent settlement. One of the Viceroy

well over a hundred years ago came to an agreement with the landlords that the amount of land revenue they should pay was fixed for ever. Unfortunately, in the bargain with the landlord no bargain was made with the tenant, and so the landlord, with a fixed amount of land revenue paid to the Government, was permitted to raise the rent until what I imagine was some of the worst rack-renting in the world took place in Bengal. The landlord got all the benefit of the unearned increment. Bengal is a province of 77,000 square miles with a population of about 50,000,000. That is a dense population per square mile, and yet in Bengal there are enormous areas of land—some of the best land in the world—kept for grazing, and owners of cattle pay two annas per head, i.e. four cents, a year for grazing rights. Of course, whether men are cared for or not, the cow must be cared for in India. India, on one-third of the world's land area, has one-third of the world's cattle, which helps to keep her poor.

In the United Provinces again the Government repudiated the idea of government ownership of land, and there is what is known as the Zemandari system. At the break-up of the Mogul Empire, the Mohammedan Empire, there were certain collectors of revenue. When the British came in, these collectors were given the right of ownership of the land. This Zemandari system differentiates very clearly between the right of ownership and the right of use. Most of the owners of land in the United Provinces have no right of use of their land, and it is difficult for them to get it. There is in the United Provinces a permanent tenancy. It differs from ownership since the tenant cannot sell his rights, but as long as a family has a direct heir and pays its rent it cannot be dispossessed. The rent is fixed by what is known as a settlement officer. He is an experienced officer of the Government, who once every generation goes into a village and, in the presence of the landlord or his agent and the tenant or his agent, fixes the rent to be paid by the tenant. Of that rent paid by the tenant to the landlord the Government takes about 30 per cent., formerly 50 per cent. There are a good many people who go round America speaking of the harm the British association has done to India, who say that the British Government is taking 50 per cent. of the produce of the land. There is over 50 per cent. of India's sugar-cane acreage in the United Provinces. A good crop of sugar-cane may give the cultivator fifty dollars an acre net profit, but he is most likely paying only from one to two dollars rent, and of this the Government gets, say, 30 per cent. to-day as land revenue. The misrepresentation of the statement so frequently made on this

continent comes from not distinguishing between land revenue and produce of the soil, or between the rent and the produce of the soil. My observation is that these rents are about as low as in any country in the world for land of a given quality. The United Provinces is one of the Congress provinces under the new Government. (Allahabad is very frequently called the unofficial capital of India because the Congress executive committee meets there.) One of the planks of the Congress party is that because of the iniquity of the Zemandari system, it will be done away with. Nobody has yet proved in India that any other system is better than this Zemandari system. Visits to villages farmed under the other systems lead me to believe that the tenants there are no better off. What I have come to see in India is that it is not the legal exaction of either rent or revenue that causes the trouble; it is the illegal exaction.

There are servants of the landlord and petty government officials in the villages who before a farmer is permitted to do anything get something out of it. Also, a study of the social structure of any Indian village would show that there may be as many as twenty-four different castes in the village. Each of these castes serves every other caste and in turn is served by it, but every last one of them at harvest time comes to the farmer for so many bundles of grain. The farmer has to carry them all. That is the custom; that is the social side of it. If you are satisfied with a static society, I suggest that the most perfect system that the world has ever seen is the system which is in effect in India to-day. But if you do not like that, if you are born at the bottom and you would like to get away from the bottom, then it is the worst possible system. It depends upon your outlook.

In conclusion, I am reminded of a little Indian story which is not without bearing on this subject. There was a young Rajah who had been to England, and on his return his loyal and devoted subjects decided that they would give him a royal welcome. They brought the elephants out of the stable and met him at the train, and paraded through the little capital city of about five thousand inhabitants. Unfortunately there was a sitting hen that had not received any notice of this procession. She left her nest, as such hens do on occasion, and somehow or other got mixed up in the procession. She got under the hind foot of an elephant and was squashed. The folks came to the elephant and said, 'Look here—this is a very bad thing that has happened. You stepped on that hen and killed it.' The elephant said, 'Yes; but you see, with the people milling round in front of me, I had to keep my eyes in front. Who would ever

have thought of anything getting under my hind foot? It was an accident pure and simple.' They said, 'Yes, we are willing to concede that, but, you see, it isn't only that the hen is killed, what about the eggs?' The elephant said, 'Yes, that is so, even if it was an accident that I did kill the hen. So the only thing that I can do in the circumstances is to take the place of the hen, and I will sit on the eggs.' In social legislation in India we find a great many elephants that are willing to sit on the eggs.

B. H. HIBBARD, *University of Wisconsin, U.S.A.*

I have two speeches to make which will take on an average just under three and a half minutes each. First as to the tenancy situation. Several of our friends have expressed great concern over the sorry situation in which many tenants now find themselves. The speakers want to revive, and revise, the tenancy of to-day, restoring in some measure the good relationships and status of the tenancy of past years. I have no objection to any particular thing said by these speakers. They do, however, remind one of the doctors who look only to the symptoms of a patient without reference to the insanitary conditions which have caused the trouble. The doctrines put forth by the doctrinaires who have dealt with the question would lead one to believe that all the troubles of the tenant pertain to length of contract, the amount of the rent per acre, and the public interest in the upkeep of the land.

True enough, until recently, the tenants of virtually the whole of the United States, outside the south, ultimately became owners. Now not only do tenants fail to become owners, but those who have attained ownership find themselves in a precarious and unenviable position. It is not the tenant alone who is in trouble. It is the farmer. The tenant outside the cotton belt is not, in general, worse off than the owner so far as annual income is concerned. Thus, to assume that tenancy has gone wrong, and needs doctoring, is taking but a partial view of the case. The main characteristic of the tenant before the War was his age. He was younger by some years than the owner class. Things were going moderately well before the War. Tenancy was a rung on the ladder. Now the ladder figure of speech is no longer applicable. It is rather a stage in a toboggan slide. At least that is what it was for quite some years, and even now it is a question whether farmers are gaining or slipping, and this statement applies to farmers, not alone to the tenant group of farmers.

The tenants are, even with comparable income, the less fortunate of the farmer class. They constitute the flotsam and jetsam on a

dammed-up stream of commerce, dammed up by the War, and not yet allowing free passage of goods. We among us (us meaning the concord of nations) made it impossible for the Germans to buy American lard, and as a result lard sold in the corn belt for two and a half cents a pound. (It has been much higher since we killed the six million little pigs.) The failure to sell lard to the Germans, wheat to the English, and cotton to the Japanese, has been a major factor in our farm prices, and incidentally in the tenancy situation. Seeing this dilemma coming we, in 1930, passed the Smoot-Hawley Tariff Act, the Act which prevented the exportation of more goods than any other import tariff Act ever passed. This Act did nothing which it was intended to do, and everything which it was not intended to do. It even inspired, to a great extent, the New Deal by getting farmers into such sore straits. Due in large part without doubt to our own trade regulations and remedial measures, we all but lost our second-best cotton customer. However, this may not be so bad since we are largely making up the loss by selling them scrap iron. On this there may be real returns both directly and indirectly. The tenant implications of this loss of trade are obvious. A few years ago we exported 65 per cent. of our cotton; a little later 55 per cent.; more recently 43 per cent. The final outcome is in the hands of the Lord and the New Deal, but neither one seems to be taking adequate care of the dislodged tenant.

So our friend Case proposes that the rental charge on farm land be adjusted to the ability of the tenant to pay. This sounds equitable, but the trouble will soon be that sociologists will discover reasons why he should not pay anything. His living standards will not permit it. The scheme of adjusting payments on farm indebtedness to the income of the farmer is of like nature, and the Government moves strongly in that general direction by reducing the interest rate on farm loans. All of which is summed up in the words of wisdom: We must cut the garment according to the cloth. In many instances this turns out to be another case of the 'Emperor's New Clothes'.

The fact is that the farmers are in a mess which reaches far beyond their own line fences and from tenant to landlord. It is clear that charging less rent may help a given tenant, or all of them for a time, but the case is much deeper. Mollifying conditions, adapting contracts to income, and providing for tenant right in improvements are all very well, but putting all this into a contract during a severe depression is like undertaking to lessen the divorce evil by putting more impressive promises into the marriage vows. In each instance something more fundamental is demanded. With agricultural

surpluses, by whatever name or euphemism they may be called, piling up over a large part of the world, while other parts are desperate in their search for food and clothing; with the ways blocked by tariffs, quotas, embargoes, and poverty—with all these conditions staring us in the face, it may be desirable, though not very hopeful, to attack the problem from the tenancy angle. We have plenty of evils to combat, out of which circumstance there may eventually arise some good. A noted statistician in Washington, D.C., some years ago remarked that since, in the census, errors were supposed to compensate, the more errors involved the better, making the compensation more certain. It is to be hoped that some of the farmers' troubles will prove to be of this kind. Shall we reduce the plant, grant subsidies, multiply moratoria, scale down debts? In any case let us not delude ourselves into thinking that the lot of the tenant may be greatly improved while the main adjustments pertaining to agriculture as a whole are still to be made. There are, and will be, tenant questions to be answered, but over the major portion of the United States the depression has not put the tenant in a worse position relatively than he was in before.

Now, for a moment, let us consider the other topic which has been brought out into the open by at least two speakers, particularly by Dr. Taylor. This is the proposal, as an offset to the undoubtedly severe competition among farmers, to re-establish a similar competition among the industrial and commercial units of society. We have on the statute books of America a law almost half a century old which was designed to do this very thing, i.e. to take friendly groups of business men as soon as they become large and successful, and make them become unfriendly again in effect, and enter the lists in the interest of humanity manifested in the return to a competitive price—even of a fair competitive price.

The Act referred to is, of course, our Sherman Anti-Trust Act of 1890. Thus far it has apparently done little except build up strength for the future. We have, however, put it to use in several outstanding instances. In 1904 the Northern Securities Company was dissolved. This company comprised three major railroad lines. Probably no competition useful to the citizenry was reinstated. Now we are trying to devise plans by which railroads may be grouped into logical units so as to obviate the necessity of further subsidy and the somewhat probable nationalization of the roads. When roads are prosperous we demand that they fight, and punish them if they co-operate. When they are unprosperous we help them to co-operate and encourage the elimination of wasteful competition.

We are now virtually saying to our big transportation companies, 'In union there is strength', instead of searching for a universal solvent, by means of which, if we can find a container for it, we hope to dissolve all large and successful organizations. Of course, we do not usually admit this so frankly, claiming that we oppose only the 'predatory' companies, but the classification has not yet been scientifically made.

The next most spectacular use of our anti-trust Act was in dissolving the Standard Oil Company in 1911. It was split into eleven parts, and, overnight, the constituent parts became respectively larger than the company which had been dismembered. Now these constituent parts are again attacked by a 'Trust Busting' administration—and all administrations are such sooner or later. After the longest and most expensive jury trial known, with jury under lock and key, the companies are convicted of conspiracy and fined a trifling sum. The fundamental problem of the proper type of ownership of unmined petroleum, of destruction of an important irreplaceable natural resource, of the most destructive instance of fierce competition wasteful beyond measure, together with some degree of monopoly at some points—all these major matters are untouched.

No doubt this is going somewhat far afield in arriving at the point of saying that the re-establishment of open and fair competition among those who sell to the farmers is a complicated, baffling, two-sided question, and if we are to depend on it as a means of helping the farmers it will be the grandchildren of the present generation who will be the first to receive the benefits. Some measure of advantage may be gained along the line of high prices through farmer-owned business beyond the farm and its equipment. The most obvious obstacle to progress seems to be the failure of governments to see the advantage in exchange of goods; the failure of the labour world to recognize the difference between high, at least higher, annual income as opposed to high wage-scales. Apparently what we are lacking is economic statesmanship rather than prophets proclaiming the year of jubilee in a return to the much-vaunted spade and hoe husbandry coupled with revived handicraft trades—and with the country store as the philosophic and political centre.

IMRE SZLADITS, *Ministry of Agriculture, Budapest, Hungary.*

Dr. von Dietze in his paper has raised the question of the system of family entails, and as this is a question which is closely linked with land distribution and land tenure in my own country of Hungary, I should like to make a few comments on it. After the

Land Reform, initiated and carried out by the Hungarian nobility in 1848, the distribution of land still displayed an unfavourable picture as a result of the thousand-year-old historical development. Even after the War only 46.6 per cent. of the territory of Hungary was in the hands of small landholders, whereas 16.5 per cent. was in the hands of landholders of the medium class, and 36.9 per cent. was in the hands of large proprietors. This situation was improved by the Land Reform of 1920, and now 52.2 per cent. is owned by small holders, 18.3 per cent. by the medium class, and 29.5 per cent. by the large proprietors.

Nevertheless, masses of Hungarian tenants and farm labourers were still unable to acquire land, and it was necessary therefore to initiate a land policy which would lead to a better and fairer distribution of the land. A strong policy of colonization was made possible by a law enacted in 1936, which empowered the Government to make use of certain categories of landed property for colonization purposes. Such categories include, for instance, land taken for tax obligations, land confiscated by legal sentence, land acquired by forestalling, property of mortgage banks acquired by public sale, one-quarter of properties above 4,000 acres, one-third of properties above 1,500 acres which had been acquired by inheritance between the years 1914 and 1936, municipal property, and that of religious endowment. Full compensation will be paid to the proprietors of land that is claimed for colonization.

In order to make a freer market for land, it was also necessary to disentail a great part of the entailed property which covers a considerable extent in Hungary. Out of the 23.2 million acres of the cultivable territory of the country, 5.1 per cent. is under family entail; of the 18.8 million acres under agricultural cultivation, 671,000 acres, that is 3.5 per cent., are entailed.

Such a large percentage of entailed property must be regarded as harmful from the point of view of land policy, for it hinders the expansion and strengthening of the rural class. But it would be a mistake to try to abolish the system completely and without a transition stage, because to do so would destroy greater national values, increase cost of production, and—especially in the case of forest property—would have very harmful effects. These considerations governed the Hungarian legislation when it enacted that approximately 30 per cent. of the area of entailed properties under agricultural cultivation should be left tied up in its old form, and the area above that proportion should be distributed as free estates among the remainder-men, among the reversioners. This policy will set

free approximately 330,000 acres, and only 1.7 per cent. of the land under agricultural cultivation will remain entailed.

At the same time, however, when legislation is tending to curtail the entails of vast territories, it is also necessary to check the breaking up of small holdings. For this purpose the settlements, which are similar to the military settlements awarded for distinction in the Great War, are made, like the German *Erbhof*, inalienable and unmortgagable, and the succession of their inheritance is strictly determined. Family settlements founded voluntarily by the proprietor, and tied in such a way that they cannot be alienated or mortgaged, would also be suitable for checking the break-up of the family properties, but this type of ownership does not thrive because the joint heirs have to be paid in full.

The newly created entailed small holdings suit best the social conditions of the Hungarian small holder. This type of landholding can only be founded by those whose primary profession is farming, and its extent cannot exceed the size of the farm that is necessary to support an average farming family. It cannot be alienated or mortgaged, but it is subject to succession in strict adherence to the deed of entailment. This latest development in Hungarian land policy shows distinctly that the Government has become conscious that only a powerful peasant class can withstand the dangers of various influences that try to undermine its social and economic stability. In order to strengthen this class and to open before it the possibilities of acquiring land, it was necessary to break with the traditional land laws and to interfere with existing property rights.

H. M. CONACHER, *Edinburgh, Scotland.*

We have heard two extremely interesting papers approaching a common topic from various points of view, and I should like first of all to express my appreciation of the paper by Professor von Dietze. No doubt it is through the accident that we are meeting here in North America and that the majority of the members of the Conference present are either from the United States or from Canada that American problems have absorbed the greater amount of time and interest in this valuable and exhaustive discussion. I should like, however, just to say that, having studied European land tenure problems for very many years, I appreciate the extraordinary ability and range with which Professor von Dietze has covered the ground of the whole question of land tenure as it has been worked out in Europe. In fact, he has shown all the massive erudition that we have learned to expect from any work that comes from a German

Gelehrter. I notice, too, about his paper that it is remarkably objective and not in any sense tendentious. If his German colleagues will not mind me saying so, some of us might perhaps have been rather alert to look for signs of the latter. It so happens that in modern Germany, whatever interests there may be on which we from the democratic countries think that the all-powerful state has pressed hardly, the German *Bauer* is certainly not one of them. And, therefore, although the problems confronting all countries are similar in respect that the last ounce of production is sought to be wrung from the farmer class, there has been no necessity found in Germany to liquidate the German *Bauer* in the manner in which the unfortunate Russian *Mujik* has been liquidated, as we were so interestingly told by Dr. Timoshenko.

I should like now to make one or two comments on Dr. Taylor's paper. Dr. Taylor very quickly got on to some interesting criticisms of the policy of the present American administration in the sphere of agriculture. His criticisms were moderate, good tempered, and well reasoned, and bore no sort of resemblance to the language which is normally used in private (or not necessarily in private) by the opponents of the present administration. I was curious, however, to see how he was going to connect the national administration of agricultural practice with land tenure. I thought he did it adroitly and with a good deal of sagacity, but he came to this in the end of the day, that he brought it back to a defence of the rights of private property. That is to say, he could not avoid associating it with the crucial question that divides the two dominant ideologies in the world to-day.

Further, if Dr. Taylor does not like further intervention of the State in the control of agriculture, and if he brings in this point of view in connexion with land tenure, I would like to recall to him that in this North American continent the whole rural economy based on the Homestead Acts is a piece of planned economy such as we have nothing like in Europe from one end of the continent to the other. In Europe our systems of land tenure have grown up in terms of custom and tradition and varieties of practice. It is true that from time to time all the nations and states have overhauled these, but you on this North American continent have had a form of planning applied to land-holding for which we have no parallel.

Before sitting down I would just like to point out, if Dr. Taylor will forgive me, that the particular point in the agricultural policy of the present administration on which the popular imagination has fastened with the greatest unanimity as being the most vulnerable

point of that administration is not one in which the rights of property are encroached on. The particular item in the policy to which I refer is, of course, the compensation for restriction of output. Anybody who goes about at all and mingles with Americans knows that there is hardly anything in the present policy which excites more derision, scorn, contempt, and ridicule than that; from all quarters it can be heard. Two years ago, when I was in the Adirondacks spending an evening with an old French-Canadian lumberman who had found his way over the border, that was the particular thing that he fastened on. He showed so much feeling in his denunciation that one could have imagined that he was paying the greater part of the bonus out of his own pocket. Later on I gathered that he had formerly been employed in one of the public forests in the State of New York under the Republicans and that the reverse at the general election which brought the Democrats in had lost him his job. Then again, when I was coming over on an American ship the other day, there was a very prosperous-looking lady holding forth to an admiring audience on this same subject.

Now I asked myself: 'Is restriction of output entirely unknown in great industry? Is it a feature entirely confined to agriculture?' And then, pondering the matter over further, I thought there was a very curious precedent in American practice for this bonus on restriction of output. I remember that when I was much younger than I am to-day one of the greatest American lawyers was Mr. Chauncy Depew, and we were told that his prestige as an advocate in the courts was so great that wealthy litigants actually paid him not to appear in a case! Can you find a more exact precedent than that, taken, I say, from the subtle refinements of technique of big business on the war-path? No, Mr. President, in spite of Dr. Taylor's fears and alarms, take it from me as a European that the United States is now being dragged, reluctantly or otherwise, out of the nineteenth century into the twentieth century, as we are growing to regard that epoch over more and more parts of Europe, and my advice to the United States is that she should come quietly.

M. EZEKIEL, Department of Agriculture, Washington, D.C., U.S.A.

A story has grown up in the New Deal of recent years to the effect that if you took all the economists in Washington and laid them end to end, they would not reach a conclusion. As I listened to previous speakers yesterday and to-day, with the exception of the preceding speaker, I thought perhaps we should substitute agricultural economists in that statement.

I wish to discuss one point that Dr. Taylor referred to in his paper, which was also made in passing by Secretary Wilson and others. The farm economic problem to-day is only one sector of the larger economic problem of bringing about full activity and employment in city industry as well as on the farm. A great many of the problems that we face in agriculture, a great many of the problems faced both in Canada and the United States and perhaps to a lesser extent in other exporting countries, are problems that cannot be solved by action on the farm. They are the out-growth of the break-down of the competitive system in so far as industrial activity is concerned. The farmer, occupying one of the last sectors of our economy where competition still prevails, feels the full force of the lack of full employment in the cities. I am therefore asking that we turn for a few minutes from the specific discussion of the farm problem as it exists on the farm to a consideration of that part of the farm problem which can only be solved in the cities.

The present difficulties go back to increasing technology of production. We have had a steady increase in technology of production both on farms and in cities. But our economic system of readjustment, so as to use effectively in our society the increasing technical productivity that science, engineering, and other techniques have placed at our disposal, has broken down. Our technological ability to produce has outrun our social ability to distribute and consume what we could produce.

The specific point at which it appears to have broken down is in the translation of higher output per worker into either lower prices or higher pay. It is easy to explain in *laissez-faire* terms how increasing efficiency of production means lower costs of production, how lower costs through competition mean lower prices, how lower prices in turn mean larger consumption and therefore more jobs for the men displaced by rising efficiency. But when you have widespread development of either monopolies or monopolistic competition which break the chain between lower costs and lower prices, you may get increasing numbers of men displaced from employment because of increasing efficiency, without new jobs appearing to absorb them. In our ten million unemployed in the United States to-day, in our estimates of perhaps five million unemployed at the peak of the boom that lies ahead in the next two or four years, we see the results of the inability of this no longer competitive society to absorb all the men waiting for jobs.

From the point of view of the farmer, new jobs for workers set free are particularly important because rising standards of living

through higher efficiency of production mean smaller proportions of people working on the farms and larger proportions working off farms. The elasticity of the demand for farm products is low compared to the elasticity of the demand for industrial products. That means that as we increase production and move towards higher standards of living, we must inevitably move towards a society with a smaller and smaller proportion of the workers on farms and a larger proportion working in city industry. The remaining farms would gradually increase in size and in degree of mechanization.

We have seen in the discussion of tenure problems to-day that there is a pressure of more people looking for farms than there are farms to satisfy the demand. The movement towards more efficient farming—with larger farms—will still further push people out of farming, and will make it still less possible to provide farms for all who wish them. The only rational answer is to shift these unneeded farmers into industrial production instead.

In a healthy society it would not be necessary to push people out of farming. Instead, industry would be attracting to it all the people that farming could spare. We would be farming with the minimum number of people necessary, while the expanding industry in the cities would be offering good opportunities to those no longer needed in agriculture. The basic problem that farmers really should concern themselves with, at least in America, is the problem of increasing demand for their products through full city production. The Agricultural Adjustment Administration in the United States has at least provided an approach to the farm end of the farm problem. It has provided a method of adjusting supply with some reference to what the demand will take. The other half of the problem, that of increasing the demand to the full quantities the people could consume if fully employed, remains to be solved. And that half of the problem cannot be solved through farm action.

The industrial problem might be solved through effective co-ordinated action to create jobs for all those in the cities whose product is needed either in the United States or elsewhere. We are beginning to realize, as has been suggested by some of the previous speakers, that merely attacking corporations and monopolies is not enough. Perhaps some form of planful action on the industrial side to provide work for all those who need work in industry must be undertaken. The proposal that Dr. Black referred to—the development of the Bureau of Industrial Economics—would be a first step. Such a bureau would study the economic problems of industry in the same way that in our country the Bureau of Agricultural Economics

had studied the economic problems of agriculture. We in the agricultural field are aware of the fact that if it had not been for the ten years of pioneering work in economic analysis in agriculture started by Dr. Taylor in the Bureau of Agricultural Economics, our Agricultural Adjustment Administration might never have functioned effectively. We feel that one reason the N.R.A.—the National Recovery Administration—broke down so completely was because there was no corresponding economic research basis in industry. The first step in effective industrial expansion to absorb in industry the unemployed workers available seems to lie in this direction.

Once an adequate factual basis is provided, the next step might be to develop some planful basis of action, so as to bring about a positive and concerted expansion throughout industry. Such steps face the danger of restricting individual freedom of action. Use of democratic procedures of planning and administration, such as have been developed in the A.A.A. operations, should make it possible to maintain democracy while taking concerted action for creating abundance.

The techniques used by the A.A.A. to develop concerted action of producers might also be used to get concerted action in the industrial field. In agriculture, production has been superabundant because of the low demand; the techniques have been used to hold down production. In industry generally, expanded production, employment, and pay rolls are needed. The same techniques may be used in industry to expand production and to bring about a positive and balanced abundance.¹

G. S. WEHRWEIN, *University of Wisconsin, U.S.A.*

I would like to call your attention to the fact that the topic for discussion to-day has two angles to it—land tenure and the social control over the use of land. It will be my purpose to address myself to the second of these topics, which may not involve land tenure in its narrower sense, but does involve land tenure in the broader sense, namely, the relation of the individual to the State or the Government in the holding and use of land. Social control over land has crept in, and the rights of the individual over private property, of which we have heard so much, have already been invaded, if you want to use that term. The right to control land rests in the State and is exercised through the police power, eminent domain,

¹ Two years ago, in the book *\$2500 a year* (Harcourt Brace & Co.), I outlined a specific proposal along these lines.

and taxation, an old and well-established principle. While these rights exist, the real question is whether people are ready and willing to make use of controls and regulations.

One of the simpler forms of restriction is the weed laws of the several States of the United States. Farmers are notified to cut certain noxious weeds, and if they refuse or neglect to do so the enforcing officer may enter on the premises, destroy the weeds, and add the costs to taxes levied against the farm. From then on these charges are subject to the same rules and penalties as regular property taxes. The same principle has been used in the wind-erosion control law of Kansas and the wind-erosion districts of Texas. Regulations of this type come under the well-established principle that no man has the freedom to use his property to the injury of others.

A second type of social control over land use is the *district*, which has become very popular in connexion with soil-erosion control. However, the principle is not new. It was used in connexion with the levees on the Mississippi over a hundred years ago and in drainage and irrigation operations. In principle, the formation of a district calls for

1. An enabling act by the State setting forth the manner of organization.
2. A petition by the landowner. This usually sets the boundaries of the proposed district.
3. Hearings are held to permit all to 'have their day in court'.
4. A referendum is held. In the Soil Conservation districts a majority of the votes cast will decide in favour of organization.
5. The approval of a State body. After this is done the district becomes a subdivision of the State, a local unit of government with its own officers and with powers delegated by the State Enabling Act. In most districts this includes the power to tax. Soil Conservation districts do not have the taxing power, however.
6. Soil Conservation districts have the power to adopt and enforce regulations of farming practices on the lands of any one within the district. Under the Wisconsin law these rules must be approved by two-thirds of the land occupiers before they become effective.

The essential features of this form of land-use control are local initiative and democratic procedure. The minority can make itself felt during the petition, at the hearing, and again at the referendum. Besides, land-use regulations must be reasonable and serve the

purposes for which they are intended. The courts can always be called upon to test arbitrary and purposeless regulations. In this manner the freedom of the individual is merged into the larger will of the group. Without the power to coerce the minority, community drainage irrigation and soil conservation would be impossible. This form of regulation is hoped to furnish a form of restriction absent in our present landlord-tenant relationships for the purpose of controlling soil erosion and depletion.

A second form of land-use control is zoning. By an enabling act the State grants to a city, village, town, or county the power to zone or district its land and declare the permitted and prohibited uses for each district. This use of the police power was first tried out in cities, but since 1920 has been made available to counties. However, the first use of this law by counties was to control the urbanized land uses—residential, commercial, and industrial uses in the area adjacent to cities and therefore not new in principle or purpose. However, in 1929 Wisconsin modified its county zoning enabling act to permit the restriction and regulation of agricultural, forest, and recreational lands. Beginning with 1933, twenty-four northern counties and one southern Wisconsin county have set up land-use controls. In the forestry and recreational districts agriculture and other land uses requiring year-long residence are prohibited, but forestry and recreation are permitted and encouraged. Under these county zoning ordinances almost five million acres of land have been closed to agriculture.

The reason for these prohibitions is to prevent settlers from selecting isolated parcels of land for farms and then demanding schools, roads, and other public services. The chief drive for zoning has been public welfare, i.e. the savings in public costs, including the danger from forest fires and illegal taking of game. Secondly, it has prevented the settlement on the submarginal land with its attendant losses to settlers individually and to the public because the farmer who fails becomes inevitably a public charge. In the third place, by keeping five million acres in forests the conservation of the soil and the preservation of the beauty of the lakes and forests are automatically assured.

Zoning is especially useful in large, sparsely settled areas where most of the land has not found its final active use. It is a directional measure; it directs the use of the land, classifying it and sorting forest from farm land and setting up recreational areas. It is quite conceivable to have areas of good agricultural land restricted against settlement until the area is ripe for agricultural development. Then

restrictions can be moved a little at a time, thereby guiding the course of settlement along existing highways, always keeping it as compact as possible.

Zoning, however, needs several complementary measures: (1) public encouragement of private forests and public forests for all the area zoned for this purpose, and (2) relocation of all settlers who were in the area before the ordinance was enacted, the so-called nonconforming users.

Zoning is a drastic and direct control over the use of land. It restricts the individual in the utilization of his property, may reduce his income, and may diminish the value of the land. On the other hand, it is in the interest of public welfare and even health and safety. This is the fundamental conflict in the use of the police power as applied to land. Courts have upheld the constitutionality of zoning; whether they will do so in its application to farm and forest land remains to be seen.

However, it should be pointed out that it is a democratic method for securing public welfare even though it restricts the rights of a minority. The steps in zoning followed so far include: (1) educational meetings at which all sides can be heard and debated—here the boundaries of districts are delineated, and prohibited and permitted uses are discussed; (2) public hearings held; (3) enactment by a county board consisting of duly elected representatives of the people; (4) approval of the towns; (5) amendment made as easy as the original enactment; and (6) administration in the hands of local officials. And finally one might add that the courts will safeguard the individual against unreasonable and arbitrary regulations.

H. C. TAYLOR (*in reply*).

I am very pleased with the way in which the discussion has proceeded to-day. You all know that the topics I discussed this morning were for the purpose of stirring up discussion on subjects that are going to be with us for a long time and which we need to think of from many angles. One of the things that I did not say in my paper but which I would like to say now is this: There is of necessity a wide difference between a long-time point of view, in which we are trying to think through the solutions that we would like to have of our problems in the interest of the long-time evolution of the race of mankind, and the short-time point of view in which we find it necessary to do at a given moment the things which seem best to meet the emergency. In my paper this morning I was not discussing the short-time pragmatic point of view but the long-time objectives.

I have great sympathy with my friends in Washington who are trying to administer the pragmatic activities of the present moment which are intended to alleviate the situations that exist, situations which exist in a very considerable measure because we have not had the right long-time planning and the right national policies. It is certainly true that if, after the War, we had started reducing our tariffs on imports, instead of increasing them, the problems of this country and of the world would have been very different from what they have been during the past twenty years. But the tariff has not been the sole difficulty; along with this restriction in our international trade and the destroying in a measure of the foreign trade of American agriculture, we have built up internal systems of limitation of competition in this country which have been even more destructive to the general welfare than the tariff itself.

We have now come to the point where some believe that the only road open to us is to continue the restriction of competition in every line with a view to securing a balance in the distribution of income. This can lead, of course, to nothing better than balanced scarcity. There are those who believe it possible that through control the opposite ideal of balanced abundance may be attained; but when we take that point of view we are facing new and undefined forms of economic society with which some of the countries of the world are struggling and to which we need to give very careful thought before embracing them. At least I think we can say that the competitive system with safeguards has not been fairly tried in our country.

The pathological aspects of land tenure in the United States, for example, have in a large measure grown out of evils which have crept into the competitive system rather than out of the system itself. These things which have crept in have to do in a large measure with things that are not a proper part of the competitive system. They are barriers to the operation of that system and result in unequal degrees of limitation of competition in the different occupations. The blighting influence of excessive limitation of competition is the fundamental difficulty in our whole system in the United States at the present time.

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FARM LABOUR AND SOCIAL STANDARDS

FIRST OPENING PAPER

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ANY international discussion on agricultural problems is confronted with the difficulty arising out of the great differences from country to country with regard to economic and social conditions which exist in world agriculture, and which can mainly be attributed to natural and geographical conditions and historical development. For these reasons, also, the standard of agricultural production and the standard of living of the farm population vary considerably from country to country. But before the World War the close contact of most countries with the world agricultural market, from which they were separated only by relatively moderate measures of protection, if at all, contributed towards levelling out conditions and ensuring an approximately common trend of development, which was favoured further by the possibilities of migrating from one country to another.

The conditions of labour in agriculture did not yet constitute a serious problem calling for government action. Hardly any legislation existed which secured to agricultural workers those advantages which industrial workers already enjoyed to some extent as a result of the coming into being of labour legislation during the last decades of the nineteenth century and the beginning of the twentieth.

The discrepancies between the conditions of life of urban and rural workers, it is true, had already for some time attracted a considerable number of workers towards the cities and towns; but the problem was not serious, partly because the population surplus was very great practically everywhere in the country-side, and partly because employers were able to counteract the effect of industrial labour conditions on the agricultural labour market by having recourse to migrant seasonal labour. This latter way out enabled employers to procure the additional labour needed in consequence of the intensification of agricultural cultivation which took place through the introduction of beet and other industrial crops. The migrant seasonal labour either came from more remote regions of the same country or from abroad. This labour, coming from rela-

tively over-populated districts, and content with less advanced working conditions and lower wages, made improvement in agricultural working conditions to a great extent unnecessary. But it also contributed for that reason to an accelerated exodus of the labour originally settled in the district in which the migrant labour was introduced.

The state of affairs with regard to working conditions in agriculture was profoundly modified by the World War, which brought urban and rural populations into closer contact each with the other than ever before, and which created among the industrial labour population social unrest of such size and vigour that it unavoidably spread to the country-side also. Agricultural workers began to claim improvement of their labour conditions and set up trade unions in order to realize this aim. Their action was favoured during the early post-War years with a certain success. The trade unions succeeded in introducing collective bargaining and collective agreements in agriculture in many countries. Simultaneously social legislation was applied to agriculture in many countries, mostly for the first time. It was either general legislation with or without modifications taking the special conditions of agriculture into consideration, or special legislation which was enacted for the benefit of agricultural labour. Quite naturally agricultural legislation and collective bargaining dealt mainly with the same problems as were the subject of industrial labour legislation, towards which it was natural to look for guidance, since agriculture itself entirely lacked experience in this field. Improvement of the standard of living of agricultural labour was thus realized through 'industrialization' of working conditions.

It must be added, however, that another way out was also attempted which looked for the solution in the change of the social structure of agriculture itself. During this period important agrarian reforms and internal colonization schemes were carried through, the social character of which is indisputable, for they aimed at transforming a part of the landless rural population into independent smallholders or, where that was not possible, at least at giving it some land from which it could supplement its income from wages and make use of that part of its time which, owing to the seasonal and periodical oscillations of the labour demand in agriculture, could not be fully utilized by the employers.

The movement towards improvement of labour conditions in agriculture was not strong, however, so that, when conditions in the various countries became stabilized and the first post-War agricultural crisis set in, social legislation in agriculture no longer progressed and the agricultural trade union movement suffered a serious

setback. For many years therefore its possibilities of action were hampered with the result that, where collective agreements were maintained, their scope and content remained stationary. The original framework hardly developed anywhere, and the system crystallized into those early forms which had been adopted at the outset.

It is possible that during this period the pressure for new social progress, which is exercised on agriculture when manufacturing industries attract labour from the country-side, was less strongly felt. The agricultural employers were able to carry through a certain mechanization of farms and rationalization of the labour organization in agriculture; the fact that labour had become more expensive invited employers to make use of possibilities in this direction which had hitherto been neglected. In practically all countries for which information is available one finds that during this period a regular and constant decline was taking place from year to year in the number of wage-paid workers employed in agriculture. Simultaneously, a much more far-reaching process of rationalization went on in manufacturing industries, and it may therefore be assumed that already during the years preceding the last world economic crisis the demand from industrial employers for rural labour was relatively less important than it would have been if industries had flourished to the same extent without passing into a new stage of technical evolution. A further sign of the slackening of contact between the industrial and the agricultural labour market during these years is perhaps to be found in the diminution, or even complete stoppage, of the employment of migrant alien labour in agriculture. National agricultural workers found growing difficulties in finding employment elsewhere, and became prepared to accept kinds of agricultural work which they had hitherto refused.

During this period, which lasted from 1921-2 to 1929-30, social legislation in manufacturing industries developed rapidly, and the differences between working conditions here and in agriculture became greater. In the same way agricultural wages, though rising slowly, did not keep pace with the increase in industrial wages.

This gap in social conditions between the industries and agriculture was, however, to be widened considerably by the world crisis, which set in first in agriculture and later in manufacturing industries. The severity of the agricultural depression made any discussion of fresh social legislation for agricultural workers futile, but the effect of the crisis went still further. In certain cases, through the abolition or modification of existing legislation and protective measures, advances already secured to agricultural labour were lost. Agri-

cultural wage rates diminished and in countries where no organization for agricultural workers existed, or no other wage-regulating machinery functioned, were reduced below the lowest levels known in this century. This happened, however, above all in great agricultural producing countries, where the farmers themselves were most badly stricken by the crisis.

But the repercussion of the crisis which, from the point of view of labour, illustrates its seriousness perhaps more than anything else was the appearance of unemployment, hitherto unknown or relatively of little importance, to agricultural workers. When the crisis was at its highest, unemployment in agriculture occurred in nearly the same proportions as in manufacturing industries. The industrialization of the labour contract which had taken place during previous years now worked out to the disadvantage of agricultural workers. The employers were compelled by their own economic situation, and enabled through the abundant labour supply available—because depression in urban occupations forced the surplus rural population to remain in the country-side—to engage and dismiss labour according to immediate needs, being no longer obliged or inclined to offer contracts of employment of long duration. The situation was even aggravated by a return of some unemployed from the towns, which not only added to the unemployment among landless workers, but caused an over-population on family holdings to which the children returned, thus further reducing the standard of living of the farming community as a whole.

Already the social progress made in the first pre-War period, which was closely connected with the internal situation in each country, had resulted in widening the differences in labour conditions in world agriculture. The past crisis had still further repercussions in this respect. The crisis destroyed the world agricultural market and left each country to come to the assistance of agriculture by its own means. The common features in agricultural development were pushed into the background, and the particular national problems became dominant and still characterize the situation to-day.

The crisis has, however, had effects other than those which are disadvantageous from a general point of view of conditions of labour in world agriculture. The situation of despair in which agriculture found itself attracted public attention, and the knowledge of rural conditions which was gained through planning and administering relief work for the benefit of the agricultural population disclosed in many cases a state of social conditions hitherto ignored. These called for improvement on their own account and not only by comparison

with the working conditions of industrial labour. This has become the impetus of the new progress which is now taking place. At the same time the social problem in agriculture took on a wider aspect, comprising now all labour engaged in agriculture whether wage-paid or working on its own account. To ensure to the farming population a certain income level through state intervention and financial sacrifices by the rest of the community became part of the agrarian policy in most countries, and included, of course, measures to ensure that wage-paid labour was given its fair share in the subsidies granted to agriculture and a standard of living proportionate to that of the farming population as a whole.

Actually the social problem in agriculture is the subject of intense discussion by the general public and of increased activity on the part of the authorities. One of the results has been the beginning of a new period of legislation to improve labour conditions in agriculture. At the same time in many countries the agricultural trade union movement has again developed, and the system of collective bargaining in agriculture is spreading further, meeting now less resistance and more comprehension on the part of the employers than was the case when this method of raising the standard of working conditions was first introduced into agriculture.

If the opinions expressed by representatives of organizations of agricultural employers and workers, and endorsed by other experts in rural social conditions, from, in all, 23 countries, who took part in the first session of the Permanent Agricultural Committee of the International Labour Office in February 1938, may be taken as significant, it means that widespread agreement now exists for accepting the principle of regulating working conditions either by legislation or collectively, no longer leaving them to be formed according to the circumstances prevailing on each individual farm. During recent years legislation on hours of work, minimum wage rates, and holidays with pay is to be noted in a considerable number of countries. Systems of social insurance, family allowances, &c., are also gaining ground. It may be added that this legislation compares favourably with the legislation passed during the early post-War years. A certain amount of experience has now become available, and the legislation has been more carefully prepared having due regard to the special conditions of agricultural production. It may therefore be expected also to be much more workable than some of the measures enacted in a hurry during the earlier period referred to.

Attempts were also made to improve, by means of state grants,

rural housing in general and, more particularly, the workers' dwellings on larger farms. Financial help from public authorities is particularly needed in this case. Modern claims in housing conditions are considerably higher than those prevailing before the War, and costs of construction have risen, because conditions in this trade have become closely assimilated to those in the urban building industries; neither can the agricultural worker afford to pay the rent of a modern dwelling, nor can his employer find the necessary money to invest in such constructions.

While it may be stressed that the efforts now developed to improve labour conditions in agriculture are based to a great extent on the recognition that these conditions themselves need improvement, the influence of industrial labour conditions has not ceased to play a role. It has again become stronger than it was during the last years before the setting-in of the great crisis. As hitherto this influence is exercised over the employment market.

In countries where town occupations are still relatively insignificant and only capable of absorbing a limited number of workers, and where emigration possibilities are closed, the problem of rural overpopulation still dominates the situation; but in countries sufficiently industrialized the revival of industrial activity, together with the fact that the surplus of the rural population, as a result of the declining birth rate, is no longer as large as it used to be, has caused agricultural unemployment to disappear and made the competition for labour between industry and agriculture still keener than it has been at any previous date.

Rural unemployment during the winter may remain rather acute in most countries, because the seasonal character of agricultural work becomes steadily more pronounced. But in an increasing number of countries there are complaints of a shortage of agricultural labour during the agricultural season proper. The employment of migrant alien labour is accordingly rapidly growing in importance. It presents a somewhat different aspect from what it did in earlier days, because the governments of the countries from which the seasonal labour comes are now active in assuring to their citizens as far as possible the same working conditions as are enjoyed by national labour in the countries to which the seasonal labour migrates.

It seems to be the small and medium-sized farms which suffer most from the increasing lack of labour. This is not due merely to the fact that wage-paid labour very often finds working conditions on large-scale farms more attractive, although it is only the large-scale farms which offer the married worker an opportunity of employment, and

for practical reasons legislation and improvement of working conditions through collective bargaining have had special reference to large-scale farming. But the smallholding and the peasant farm feel more than any other enterprise the consequences of the decline in the birth rate, because they have, during the period of abundant labour supply, adapted themselves to a labour organization allowing only the employment of young unmarried workers who, after a few years of employment, either went to the large estates as married workers, or transferred themselves into other branches of economic activity. It is evident that in view of this particular age composition of the labour population on peasant farms, concentrated round a few age groups, the decline in the birth rate, and therefore the number of persons entering the employment market annually, is more quickly and strongly felt than on large estates or in manufacturing industries, where the age composition of the labour population corresponds more closely to that of the population as a whole. The result has been that the working conditions of the operators themselves and of members of their families have become more difficult when they have not been able to reduce the amount of manual labour to be done by the help of mechanization and rationalization. For these reasons it is even now in some countries a state duty to facilitate the equipment of small farms with adequate machinery.

Though the general trend is towards labour shortage, it is, however, necessary to add that in some countries, more especially in the New World, mechanization and rationalization of farm work seems to proceed so quickly that the displacement of labour which takes place causes some unemployment because this labour cannot be absorbed with equal rapidity by other trades.

The evolution of the wage level in agriculture during recent years corresponds very well to the evolution in social legislation and collective bargaining and the development of the agricultural employment market. In some countries wages have risen so rapidly that it is necessary to go back to the years during the War and inflation to find a parallel. In other countries where labour is in a less favourable position wages have recovered to some extent from the minimum level reached during the crisis, but are still far from such rates as would assure to workers relatively the same economic standard as they enjoyed before the crisis.

The fairly favourable trend in agricultural labour problems which has been observable during the last two or three years must, however, not be over-estimated. The fact that it has been possible in one country or in another to improve certain aspects of working condi-

tions in agriculture by legislation or through other forms of regulation cannot, *de ipso*, be taken as a sign that the same achievements will be possible elsewhere. Any substantial progress in the conditions of rural labour depends in the last analysis on the state of economic affairs of agriculture, which, without the help of other classes of the population, disposes only of a limited margin for improving the conditions of the workers employed, and the possibilities of such assistance from the rest of the community are very different in the various countries. In countries where highly developed industries and important international commerce constitute the national wealth, it is feasible for the governments to assure such assistance to agriculture as will allow approximately the same social legislation as in manufacturing industries to be applied. In countries where agriculture dominates, governments have at their disposal only restricted means because of the relative unimportance of other branches of economic activity. These means are only sufficient to assure a minimum standard of living to the agricultural population as such, and leave nothing over for giving special attention to improving the position of the wage-paid labourer.

But even in cases where agricultural labour is considered to be in a rather favourable position, its conditions of work are far from satisfactory. The most striking example, which in the briefest possible way may illustrate the state of affairs, is perhaps the fact that, in the country where social legislation has been applied in favour of agricultural labour to a larger extent than anywhere else, the average wage of an agricultural worker is only three-fifths of what is considered by experts to be a reasonable minimum wage rate for labour in general.

In many respects the evolution of agrarian policy since the War seems to facilitate the taking of such steps as will be necessary to bring about further progress in labour conditions. During the crisis, in the course of a few years, the most individualistic of all callings, namely, agriculture, advanced far and fast along the path of directed economy, from which no prospects of return seem visible. The acceptance therefore of planning in agriculture can obviously not meet with any legitimate resistance in principle when it is also applied to its labour problems, and it may make the introduction of really constructive solutions easier.

The essential is that the agricultural labour problem should be understood in all its amplitude; that it should be really understood to what a state of disequilibrium in the whole labour situation post-War trends in labour conditions in agriculture bear witness.

Nor can we be content merely to admit that the agricultural labour problem cannot be solved by paying regard exclusively to the natural conditions of agriculture itself and its possibilities of progress in efficiency. Outside factors are also exercising considerable influence. It is indispensable to admit further that these factors themselves are changing and that in all probability they are evolving in a direction which will multiply the force with which they affect the agricultural labour problem.

Full knowledge of these factors is needed and more especially of the probable trend of the standard of living of the population engaged in non-agricultural occupations, and of the trend of the labour demand in these occupations, taking also into consideration the increasing movement towards shorter working hours. Finally, it is essential to get as exact an idea as possible of the total labour supply which will be at the disposal of agriculture, manufacturing industries, commerce, transport, &c. Only with such knowledge can a really constructive social labour policy in agriculture be built up.

FARM LABOUR AND SOCIAL STANDARDS

SECOND OPENING PAPER

J. F. DUNCAN

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THE composition or structure of the agricultural population varies widely from one country to another, and the term 'farm labour' may be used to cover different groups of the working population. Any precise definition is impossible, but some delimitation is necessary if discussion is to be kept within fruitful boundaries. The first group, that of the wage-earners, may appear to be capable of reasonably precise definition, but any one who has attempted to reconcile national census figures with agricultural statistics will know that there are many pitfalls. There are workers who are more or less regularly employed, those who seek their livelihood in wage-paid work only; there are those who are casually employed or employed for seasonal work only; and there are the migratory workers who form a distinct class in many countries and may cross international frontiers. The wage-earner group is not a homogeneous group in any country, but there is more community of interest in this group than in any other, because of their interest in the social problems which are common to all wage-earners.

This group is larger numerically, and more widespread, than is generally recognized. No reliable statistics are in existence to show the composition of the agricultural population in the various countries, but Lady Louise Howard in her book *Labour in Agriculture* gives a table in which she brings together the available figures up to 1933 for 24 countries, and these show that the percentage of agricultural wage-paid workers to the agricultural occupied population ranged from 10 to 65 per cent.¹ Without claiming complete accuracy for the analysis in any country, the broad fact emerges that the wage-earner is an important member of the agricultural community.

When we leave the wage-earner group and consider the groups which are intermediate between the wage-earners and the operators, we enter on a chequered field. In nearly every country we find

¹ Bulgaria 10, Canada 17, Estonia 19, India 20, Ireland 21, Switzerland 21, Lithuania 22, Germany 22, Sweden 23, Austria 25, United States of America 25, Norway 32, France 35, Australia 35, Finland 36, Denmark 37, Belgium 37, Czechoslovakia 38, New Zealand 45, Italy 43, Hungary 47, Scotland 54, England and Wales 63, Netherlands 65.

examples of some system of sub-contracting; the system of share-cropping is found in many countries, notably in the U.S.A., Hungary, and the southern countries of Europe; share-tenancy is widely spread and may range from little more than a payment in kind to a partnership in providing capital; and we have everywhere the 'dwarf holding' which is not sufficient to enable the holder to maintain himself by its cultivation. Finally, we have the unpaid family labour of the operators' families. These do not exhaust all the groups which farm labour may cover, but they are the principal groups.

Sub-contractors and share-croppers form a relatively simple group. They are essentially wage-earners paid by results. The fact that the earnings are often family earnings rather than wages paid to individuals is a difference in degree only, since family wage contracts are common in agriculture everywhere. Share-tenants are not so easily classified, because they vary from workers, who contribute little more than their labour, to operators, who may own a considerable share of the working capital. A considerable number, however, would fall into the farm labour group. The 'dwarf' holders ought to be included in farm labour. Many of them have to depend upon wage-earning to eke out a living, and many of the migratory labourers are drawn from this class, but, even where they are unable to secure employment for wages, such livelihood as they can squeeze out of their tiny holdings is a return for labour; what they earn does not come from that possession of property which would distinguish them from wage-earners. In general their standard of living is not as good as that of agricultural wage-earners in the same country. The unpaid members of the operators' families may occupy a different status from that of wage-earners, but they ought to be included in the farm labour group in considering the relation of that group to social standards.

The picture then presented by this rapid sketch of farm labour is one of a considerable welter of conditions which is to be found in every country. It is impossible to make even a guess as to the number of people covered by the term 'farm labourer' as delimited, but it is obvious that a very large number of people in every country must be involved.¹ It has been estimated that nearly two-thirds of the existing world population is engaged in agriculture. The impact of social

¹ Some figures given by Professor Nelson, University of Minnesota, in his paper to the Permanent Agricultural Committee of the International Labour Office are interesting. The total number of wage-earners in agriculture in the U.S.A. in 1930 was 2,732,972; the number of migratory labourers on the Pacific Coast is estimated at 150,000 to 200,000; in 1930 share-croppers were operating 716,000 farms, over 10 per cent. of all farms in the U.S.A.; unpaid farm workers in 1930 numbered 1,659,792; and farm operators, both tenants and owners and managers, in 1930 numbered 6,079,234.

standards on farm labour is therefore one of the major social problems, and it is international in its character.

Social standards as they affect labour fall into two groups. There are those which have arisen out of the wage contract and which regulate wages and working conditions and provide against such risks as accidents and unemployment, and there are the social standards which have arisen out of community life and regulate such services as health and housing, education, the use of leisure, and provision for invalidity and old age. No clear-cut division can be made between the two groups, because they overlap at many points, but the two groups are convenient because the approach to the setting up of standards has usually differed. The effort to set up standards arising out of the wage contract has generally proceeded by way of voluntary organization on the part of the wage-earners. After a period of struggle, collective bargaining may result in codes of wages and working conditions, and voluntary insurance against invalidity and unemployment may be organized by the trade unions. After a certain stage is reached, legal sanction may be sought to give greater security to the established codes. Development has, of course, varied in the different countries and in different industries, but the drive for the establishment of such standards has generally come from the workers themselves, and the intervention of the State has come later, but even now, in most countries, the regulation of wages, working hours, and other conditions of employment remains largely a matter of collective agreement, although the tendency everywhere is for such voluntary agreements to be supplemented by definite social standards set up by the state. The regulation of the employment of women and children has become increasingly a matter of legal enactment. In a good many countries state schemes of insurance against accidents and unemployment are in existence; the methods of raising the funds may differ, and the proportions raised from industry or from general taxation may vary, as do the methods of administration, but the responsibility of the state is recognized.

These standards are designed to give the worker a measure of security as a worker in a particular employment. They aim at securing adequate remuneration for his work, protection against excessive hours of employment, and provision against the risks which such employment entails. In general the cost of meeting these standards is a charge upon the undertaking in which the worker is employed, and the standards vary in the different industries, but there is a growing movement to lay down certain minima and to compel all industries to conform to these minima.

Social standards in communal services are a more recent growth and have developed out of the growing interdependence of the citizens in the modern state. They are designed to deal with the citizen rather than the worker in any particular industry. Popular education was the earliest service of this character and has been furthest developed; health and housing services have become increasingly a matter of social provision; schemes for provision against invalidity and old age are to be found at various stages of development in many countries. The methods of organizing these schemes, and the extent of the provision made, vary greatly from one country to another, but they have this in common, that they recognize the responsibility of the state for making provision and the necessity for creating social standards for the well-being of the community.

A considerable impetus was given to the development of social standards by the setting up of the International Labour Office under the Treaty of Versailles, and it is significant that, during a period when international co-operation in other directions has been breaking down, the I.L.O. has continued to function, and on the whole to function successfully. Both in the field of social standards arising out of the wage contract, and in the field of communal social services, a willingness to create international social standards has been shown. Many important international conventions have been agreed to, and ratified in a considerable number of countries, and a series of recommendations has done much to stimulate developments in various countries. The significant fact, however, is that a beginning has been made to develop international social standards. That not only gives an impetus towards further development, but also ensures permanence to the movement.

So far we have been considering the general movement towards the establishment of social standards, but we must now consider how far that movement has affected farm labour. As far as the first group is concerned I would refer those interested to Lady Louise Howard's book *Labour in Agriculture*, the only international survey of the whole problem, and to the publications of the I.L.O. for detailed information as to the position in different countries. Put very briefly the position is that in every country the standard of living of farm labour is very low, both by itself and relatively to the standard of other workers. In many countries there is neither voluntary organization nor any state regulation of wages and working conditions. In some of the European countries and in Australia and New Zealand social standards are emerging, it may be in the form of collective agreements, or by legal enactment, and sometimes by a combination of

both methods, but even where standards are emerging they are always definitely lower than those for other classes of workers in the same country.

The reason for this is to be found in the development of agriculture. A definite class of wage-earners has to emerge before organization can be created, and even then the small-scale units of the industry and the fact that the workers are so widely scattered render organization difficult. Two other factors militate against organization: the large proportion of adolescent workers (about one-third in Great Britain are under 21 years of age) and the effort of the most adventurous and enterprising farm workers everywhere to escape from agriculture. It has to be remembered, too, that in many European countries it was illegal for landworkers to organize until twenty years ago. The important fact, however, is that the demand is now being made for the establishment of standards. The extent of the change may be measured by considering the position in 1921 and again in 1938. When an effort was made to have the hours of labour in agriculture put on the agenda for the Conference of the I.L.O. at Geneva in 1921, it not only failed to secure the necessary two-thirds majority, but the question was raised whether agricultural questions were within the competence of the I.L.O. and the question had to be submitted to the Permanent Court of International Justice at The Hague before it was decided that agricultural questions were included. In 1938 the Permanent Agricultural Committee of the I.L.O. at its first session adopted the following resolution:

The Committee is of the opinion that in the general interest of agriculture wage-earners hours of work should be regulated.

It realizes, however, the difficulties which the application of such a regulation would meet with by reason of the essential diversity of agricultural work.

Further study of the question is still necessary before it can be usefully placed on the agenda of the International Labour Conference.

The Committee therefore requests the Governing Body to instruct the International Labour Office to continue its studies of the question with a view to its being placed on the agenda of one of the very next sessions of the Conference after it has been re-submitted to the Permanent Agricultural Committee during the year 1939, which could then make positive proposals to the Governing Body.¹

¹ As showing the stage reached in the development of international social standards for farm labour, the other resolutions adopted unanimously by the Permanent Agricultural Committee, which is representative of governments, employers' associations, and landworkers' unions, with added experts, are given:

(a) The Committee is of the opinion that the question of holidays with pay in

The position of the landworker in respect of communal services is even less favourable. Since these are always state provisions there seems no good reason why landworkers should be treated differently from other citizens, but it is the fact that where such provision is made the standard for landworkers is generally lower than for other workers, and in many countries the landworkers are left out entirely. Even in education, the earliest service and the one which is common to most countries, the educational interest of the child to a greater or less degree is made to subserve the assumed need of the agricultural industry for child labour. In some countries the number of attendances required from the rural child is lower than the number required in industrial districts; in others the age of entry into employment is lower for rural children; and in practically all exemption from school attendance is more easily secured for agricultural work. In the small number of countries in which the social services are the same in law for rural as for urban workers, it is found in practice that organization and administration are always less effective, and the landworkers are less well provided for. The whole position is very well summed up in the phrase that the landworker is everywhere regarded as 'a second-class citizen' in practice, while ideally supposed to be the salt of the earth.

Yet while the actual position is unsatisfactory it is clear that the trends are all in the direction of establishing social standards for landworkers, and certain developments are likely to accelerate the movement. We have to reckon with the effects of popular education and the development of communications. Rural communities are much less isolated than they were. Road transport has tremendously increased the mobility of rural dwellers, while the spread of newspapers and journals and the use of radio have brought

agriculture in favour of agricultural workers in continuous service should be brought before the International Labour Conference.

It requests the Governing Body to place the question on the agenda of one of the very next sessions of the Conference.

The Committee, having in mind the application in detail of holidays with pay in the various countries, points out the interest which attaches to the use of the method of collective agreements or of other similar methods.

(b) The Committee suggests to the Office that it should continue its studies on the question of the protection of children in agriculture, being guided in them by the discussion of the Committee, with a view to presenting a full report for final discussion at the next session of the Permanent Agricultural Committee.

(c) The Permanent Agricultural Committee requests the Governing Body of the International Labour Office to instruct the Office to continue its studies on the question of a system of wage-fixing for agricultural workers and asks the Governing Body to examine the desirability of placing this question on the agenda of one of the next sessions of the International Labour Conference.

the rural community into a wider world of mental activity. For better or for worse, the old division between the rural and the urban communities is breaking down, and the stock of ideas is becoming a common one. There is also the spread of industry. Every country is bent on developing its own industries and is less content to remain an agricultural country, while in the old industrial countries there is a definite trend towards the decentralization of industry. It is significant that it is in the countries where industrialization has been carried furthest that the agricultural trade unions have developed, and the most insistent demands are made for social standards. It is in these countries that standards are being set up. And, finally, we have to reckon with the rapid spread of national 'planning' in agriculture. In democratic countries, at any rate, it is inevitable that any 'planning' of agriculture will be accompanied by a demand for social standards in the interest of the workers.

If my analysis of the situation is sound, then a number of economic problems emerge. The form these problems will take in any country will depend upon the structure of the agricultural industry in that country. In those countries where there is a considerable body of wage-earners in agriculture, we have to reckon not only with the growing demand for social standards in agriculture, but with the effect of the social standards in industry. The 'rural exodus' is not a new problem, but, as social standards develop, agriculture will be further handicapped in competition for labour if it continues without social standards, or if its standards fall markedly short of the industrial standards. This problem is acute in some countries to-day. It will vary in intensity with the state of industry, but the common experience is that the workers lost to agriculture in boom periods in industry do not return once they have escaped. The loss is not merely quantitative; in some countries that would be a boon; it is always qualitative, and that is the most serious feature.

Unless, therefore, we look forward to a reversal of the trends in those countries having a considerable wage-earner class, we have to consider the effect of the impact of social standards on agriculture in these countries.¹ How far the industry, as at present organized, can meet higher wages, the limitation of working hours, and insurance against unemployment, invalidity and old age, if these are to become a charge on agriculture, will depend on the stage of organization

¹ Professor Nelson (op. cit.): 'Should the trend towards mechanization continue unabated with a concomitant "enclosure" movement and increasing concentration of land ownership, the United States may be confronted in the near future with the existence of an agricultural proletariat of considerable magnitude. This development, which is already under way, will be a relatively new phenomenon in rural America.'

reached in each country. Judging from the experience in those countries where a beginning has been made, there is a considerable amount of 'slack' in the organization of agriculture which can be taken up to meet the first standards laid down without seriously disturbing the structure of the industry. Low wages and unrestricted hours lead, in agriculture as in other enterprises, to the waste of labour and to inefficient and unenterprising management. The first results of enforcing standards have been the raising of the level of management, the introduction of more machinery, and the more efficient use of labour. But so far the standards enforced have been very low, and the limitation of working hours has made little inroad on the long working day. If the standards are to be raised sufficiently to remove the gross disparity between those of industrial and those of land workers, then the productivity of labour will have to be considerably increased. The problem then arises whether that can be done with agriculture conducted with the present small-scale units. It is difficult to see how reasonable social standards can be established under the present structure. Increased productivity involves a high technical standard of management, the increased use of machinery, and the application of scientific methods to crop and stock production. It requires a higher skill on the part of the workers, and that involves specialization and the division of labour. Adequate scope is necessary if these factors are to be efficiently used, and the trend is towards the larger unit of enterprise. If we consider the practical import of any limitation of the working hours for stock-keepers, we can see that the feasible limit is strictly defined by the size of the unit. Where the herd or flock cannot bear the labour cost of more than one worker, that worker is bound to work a minimum of nine hours a day six days a week, with a minimum of five hours on Sunday. The only practicable way of securing to a very large body of farm workers the necessary leisure to conform to modern standards is to enlarge the unit of enterprise to enable enough staff to be economically employed on some system of shifts.

The demand for social standards will be strongest in those countries which have a considerable class of wage-earners, and we can see the first efforts to lay down standards in those countries, but alongside those wage-earners we have the sub-contractors, share-croppers, and the unpaid family workers. We have to consider the effect of the standards for wage-earners on those workers. Where they are found in considerable numbers, the difficulty of applying any standards to them is used as an argument why standards cannot be applied to wage-earners. This is a recognition of the fact that it would be

practically impossible to maintain standards for wage-earners without making similar provision for the unpaid workers who are to be found in the families of sub-contractors and share-croppers as well as on the family farms. We are faced, then, with the question whether we are to accept the general movement towards social standards for all farm labour or to attempt to withstand that movement in agriculture and seek a way out in the family farm, with its associates of share-tenancies, share-croppers, and small-holdings.

Whether it is possible in the modern community, with its trend towards decentralization in industry, its developing means of communication, and its pervasive cultural standards, for agriculture to cut itself off from the rest of the community is a very doubtful proposition. But there are certain forces at work which may render the traditional family farm and small farming unit less attractive in future. The smaller unit has always been defended on the ground that it provides an 'agricultural ladder'. Now, the purpose of a ladder is to enable one to climb from a lower level to a higher. The lower level was the insecurity of the wage-earner's position, and the higher level was the status and security of an independent operator. But as Professor Ashby pointed out in his paper to the Third Conference (*Proceedings*, p. 205), 'Methods of industrial and social insurance, with state support, are removing some of the risks hitherto incurred by those who worked for wages', and he went on to show that in Great Britain, where these methods have been most fully developed, 'economic security now begins to lie with the person employed for wages rather than with the "independent" small-holder or family farmer'. Developments in the intervening years in many countries have shown that the 'independent' position of the small-holder or family farmer has required state propping, and there are no signs yet that the need for such propping has ceased.

The indications are that the upper rungs of the ladder are becoming more difficult to reach. The ladder has shorter steps between the rungs so long as the frontier is being extended and there is a keen demand for labour; the steps are much longer when agriculture becomes intensive and there is not the same premium on labour. With growing mechanization and the need for outlays on fertilizers, the capital requirement of the family farm increases, while the opportunities for earning enough to enable a worker to reach the next rung become more restricted. The lengthening span of life and the lower birth-rate may lead to a good many changes in agriculture; one likely result will be that the unpaid family workers will have to look forward to a longer service before they can hope to succeed to the family farm.

When account is taken of those factors, the 'agricultural ladder' is likely to be less of a lure than it was.

It would appear, therefore, that the impact of social standards on agriculture has to be added to the other forces which are acting on agriculture to force changes to meet the new conditions. Agriculture has had to adjust itself in the past to big changes and to find its own level according to the pull of economic forces, with minor measures to cushion the impact of those forces. To-day the efforts everywhere seem to be directed to insulating agriculture from the forces acting upon it, by various schemes of protected prices or open subsidy. We cannot look forward to these stop-gap measures being permanent, and we ought not to do so. Nor ought we to let things drift. We ought to try to understand and measure the forces at work and consider how we can develop agriculture to meet the present and emerging needs and make its contribution to human welfare.

DISCUSSION

W. SEEDORF, *University of Göttingen, Germany.*

The two papers of Mr. Duncan and Dr. von Bülow have treated farm labour from various aspects, mainly from the practical side and in the light of questions of the day. In opening the discussion, I would like to put the question: What contribution can science in its various branches make in helping to solve the problems of farm labour? The contribution of science will always be modest, but, if it is applied on all sides, we may nevertheless hope for some success. The papers have already shown us how extremely various and diverging the definitions of farm labour and the farm worker are. For men of different countries and continents it must, therefore, be extremely difficult to reach an understanding in their discussions. Each one of us comes with other conceptions and ideas, but uses the same terms in expressing them. The difficulties are again considerably increased by translation. We should be conscious of the fact that, where we find divergency or even conformity of opinion, this may sometimes be due to mutual misunderstandings. All the same, the conceptions of farm labour and of the farm worker have so much in common—being matters of practically equal importance throughout the world—that agreement on this point should be easy to reach.

In the short time at my disposal I can only try to point out the major aspects and to draw attention to some points which have been

too little noticed by science, but which may be useful. What is primarily needed is the knowledge of the facts and how they have developed. That signifies a geography and history of farm labour. Folk-lore and ethnology have covered some preliminary work in this field, but not usually on the aspects that interest us from the point of view of farm labour, that is, efficiency, labour income, fatigue, hours of work, costs of production, and standards of living. We should seek for records of the greatest possible exactitude of farm labour and labour systems and institutions of many countries.

The social and economic sciences have given us in all countries a closer approach to farm labour as a social phenomenon of national and rural life. This is first a question of agricultural population and its proportion of the whole national population. We desire healthy nations. I think an adequate proportion of rural population, which may vary greatly in nations of different economic types, is necessary to the health of the nation. We must try to determine the optimum and the minimum. It will be the task of sociology, particularly rural sociology, to establish on scientific principles the conditions for a healthy rural population, sound in body, mind, and soul, and also sound as a social body with its component groups of agricultural entrepreneurs, large and small peasant farmers, and farm workers. And here opinions differ widely as to what is sound. To a great extent decisions will always depend on the character of the nation in question and its economic system. We in Germany fully agree with Dr. H. C. Taylor that economics must not be allowed to rule the soul of man. And also from the German point of view we can agree almost entirely with the excellent paper of Mr. M. L. Wilson. The prosperity of the rural population will be the basis of national prosperity. And here a sufficient growth of population as an indication of a healthy nation is a decisive and significant feature. The economic basis of a healthy rural population must be a sound agriculture, which is, to use the expression of Mr. Wilson and the expression which I myself have almost literally used for many years, not a profession but a way of life.

The relations between town and country and the menace of the rural exodus must be studied. The natural advantages of the city and the industries, particularly in highly industrialized countries, must be counterbalanced by preferential treatment of the rural and farm population. As Dr. von Bülow points out, in many countries the state has imposed on itself and on society burdens for the benefit of the rural population. The farm worker must receive not always equal but equivalent wages, taking into account his purchasing

power and his pattern of life. The price relations between farm and industrial products and services must make this possible.

It is not only farm workers who are, as Mr. Duncan says, regarded as second-class citizens. For a long time the rural population as a whole has been in this situation in highly industrialized countries. I have shown that in an essay in the I.A.R. entitled: 'Strengthening the Vitality of the Rural Population.' In many points the city has a natural superiority over the country-side, in health service, in supply services, in transport, in education, in intellectual and artistic life, &c. An equivalent must be found for the country-side, giving farm labour the same purchasing power as urban and industrial labour. All rural inhabitants should receive preferential treatment by the state and public authorities. State and nation owe this to their existence. Farm labour incomes and wages are produced on the land. What has not grown cannot be harvested. The purchasing power of this produce determines the standard of life.

The fixing of wages by collective wage-rates under state control implies a guarantee by the state of certain prices for agricultural products. The wages must be just as compared with those of other groups and professions. This necessitates just prices for agricultural products. I agree with Mr. Booth that without price stability there can be little social stability. The suggestions of Secretary Wallace on the question of the 'ever-normal granary' seem to me to be very significant; they are already of practical importance in German price policy.

Unequal wage-levels in industry and agriculture are only tolerable in times of depression and unemployment. As soon as industry prospers, it draws away the workers from the country-side. In contrast to industry the farmer cannot close down his plant; he must consequently raise wages above fixed wage-rates. These wages are then out of parity with the price-level based on the rate of wages. This means that the farmer incurs debts and lowers his standard of living, or he leaves his farm.

I have come to know share-cropping in various countries, in U.S.A., France, and Russia. In Germany this system gained ground during the inflation, when money ceased to be a means of payment. It disappeared again with the stabilization of the currency. In France, I am told, the trend is moving away from share-cropping (*métayage*) to cash rents; that means towards greater independence and, later, full ownership. The character and customs of the people decide these matters. Certain forms of wages on an efficiency scale are also important, as they allow the worker a share of the production or the increase of production due to his efforts.

The increase of agricultural production by means of agricultural science is one of the most important factors in improving farm labour and the farm workers' position. Education, particularly the vocational training of the whole rural population, the farmer and peasant as well as the simple farm worker, must be universally and energetically promoted. Particularly in education the countryside is enormously inferior to the city.

The increase of the purchasing power of agricultural products largely depends on the decisions of governments and nations. A free economic exchange between the nations would be dependent on the security of permanent peace.

The most important scientific objective is the promotion of a science of farm labour. For a long time, in the fostering of the agricultural sciences, agricultural labour was unhappily forgotten. Apparently it was believed that by the invention and introduction of farm machinery enough had been done in this field. Thus the science of farm labour is far behind all other branches of agricultural science. The science of industrial labour has had far greater attention and can give many impulses to farm-labour science.

The first task is the scientific study of the working man, primarily from a physical point of view. The anatomical and physiological bearings on labour performance must be studied in the various kinds of farm work. Assurance of continued health is the goal. The various agricultural professional diseases must be combated. Only the physically best and fittest are good enough for the farm. The negative selection, far advanced by the rural exodus, must be checked. Physical culture, sports, apprenticeship with systematic training, avoiding over-exertion, must all help us to reach this goal.

The health conditions of the rural population, of the peasants and workers, are often worse than those of city dwellers. Even though the contrary is generally assumed, as food is produced on the land, the diet of the rural population is often unsatisfactory, less so in quantity than in quality and preparation. Fresh commodities, fruit and vegetables, are often more easily and cheaply obtained in the cities than in the country.

Mental ability is of increasing importance in farm labour. There is no calling which requires greater diversity of proficiencies than agriculture. Only the man who thoroughly knows his job is a capable man. That signifies that both the farmer and worker must command a rich store of knowledge and the ability to apply it. Much remains to be done. It is not true that the fool is good

enough for farm work. Agricultural labour is not unskilled labour. In Germany we have introduced an agricultural apprenticeship just as in the handicrafts.

Efficiency is also highly dependent on character and spirit. We do not work primarily by the body, but by mind and will. Up to now labour psychology has received little attention in our science. A valuable help in this respect may be expected from ethnological psychology.

According to the observations I made in U.S.A.—a real field of experiment for this question—the attitude of the different races with regard to farm labour is fundamentally different. I had the impression that the Indians had scarcely any farming ability, and that the negroes, too, were inefficient as independent farm workers. Commercial farming is almost exclusively in the hands of the white man, but there are very distinctive differences, due to the origins of the European nations, in the aptitude for the various forms of farming, and also in mobility and ties to the land.

Observations in other countries confirm these findings. The system of farming not only depends on soil, climate, and market, but also very greatly on the nature of the farmers and working men. Only with these considerations in mind may we draw comparisons between different nations. Even within one country like Germany there are very distinctive differences. The spirit of freedom and of independence, the wish to settle on land of one's own, are quite differently developed in various parts.

Even externally one may perceive the differences in farm work between the different races and even small national groups in the way of differing forms of farm tools and implements. There is a significance in this not confined to ethnological interest. One of the great tasks of a special science of farm labour will be to find, by exact studies of the existing tools and implements and the form of their use, the best method for the execution of work. We cannot look for all progress in agriculture and farm labour solely in mechanization and use of machinery. Almost with the words of Mr. M. L. Wilson, I pointed out some years ago that we have precipitated technology on to the rural population, heedless of the social consequences. In order to eliminate the divergencies of labour efficiency and labour income in farming and industry, we must certainly apply all technological progress possible in agriculture. Machines can and must help the small farmer particularly. In Germany we too place great hopes on the small rubber-tired tractor. But at the same time we must take care that the rural population as a whole is not disturbed

and may remain the sound basis of the nation. The philosophical doctrines of rationalism and liberalism in the last century greatly hastened the dissolution of old ties. This was an urgent necessity in the case of feudal bondage and compulsory attachment to the soil (*glebae adscriptio*). But at the same time many beneficial ties were torn apart. Now we have to revive the old spirit of common and mutual aid by co-operative systems. In this way the small and medium farmer may balance the natural advantages of large-scale farming, and the workers may be enabled to gain equal labour efficiency and labour returns.

The outward form of farm labour must, as far as possible, be made similar to industrial work. In agriculture it has been possible, thanks to improvement of working methods and increased efficiency, to shorten the working hours quite considerably. Further progress can facilitate a further shortening of working hours and an increase in labour output. A saving of time going to and from work by means of bicycles, motor-bicycles, and cars; good layout of the fields and of the farm buildings for utilization of labour—all this will help the farmer. The alternatives of village or isolated farm, small or large village, long-street village or clustered village, have in the main already been settled by history in the old civilized countries. But they are important in new countries. What man may gain by easier physical labour or by wages on the isolated farm, he often loses spiritually and intellectually by loneliness.

Paid holidays have spread from the civil servant, who has enjoyed them for a long time, to the industries and then to farming. It is obvious that, in the competition for labour, farming must resort to all measures that can reasonably be borne. The phenomenon is not quite novel. For as long as there have been annual wages in agriculture, paid holidays have often been given to farm servants, for instance, to help their parents. But in seasons of labour stress, in the open seasons, it will be difficult to do without the worker, whereas in winter it will be easy. But will the peasant farmer be able to find holidays for himself and his family? Sufficient labour reserves at wages comparable to industrial wages are here a pre-condition.

Is the greater security which the peasant enjoys, thanks to his ownership, counterbalanced for the worker by social insurance? We have had this insurance for a long time in Germany. The advantages are undeniable, but they do not fully compensate for the feeling of security that lies in ownership. We have also had the experience that insurances can be lost by break-down of the currency.

Much has been done to improve housing, particularly for the

workers through state subsidies. But would it not be better to put farming in a position to enable it economically to provide the necessary funds out of its own resources?

Intensive farming, such as sugar-beet and truck-crop cultivation, brings labour peaks which can only be overcome by supplementary labour. The farm becomes a seasonal enterprise, especially in large-scale farming. This is not so pronounced in small farms, as they are more diversified, owing mainly to their live-stock enterprises. The migratory farm workers, to whom the system gives rise, are an undesirable social phenomenon, especially when they come from foreign countries. They scarcely fit into the peasant farm and the peasant family. When they are cheaper than home labour, they offer an advantage to the large farms where they can be very cheaply lodged and fed. It is, however, an advantage to countries with less highly developed farming since their farm workers and peasants' children, by working in countries with intensified systems of farming, bring back home not only their wage-earnings but also a full measure of knowledge and skill.

As has been proven by the development in many countries, large-scale farming is not *per se* superior to farming in smaller holdings. It may only be the case in extensive types of farming such as live-stock ranching and extensive grain-cropping. The intensive forms of farming, such as market-gardening, offer greater advantages to the smaller holding. But the persistence of this size of farm depends on the sum-total of work—both physical and mental—that is performed on them. The form of labour organization is especially important and must be brought to optimal use by scientific methods.

Even if in many respects the mechanical efficiency may be superior on the large farm, the spiritual achievements are greater on the small farms. The independent peasant who works with his wife and children for himself and his family has a greater impulse in his sense of freedom and independence and a greater joy and satisfaction in his work than the wage-earner. This was also emphasized by Dr. Taylor. Every nation needs these free and highly independent men. In the cities and industries the development has been to render even more men dependent and has made them wage-earners and employees of great corporations or of the State. There is thus a change of mentality and ideals in the nation which finds its expression in the decline of the birth-rate, one of the severest scourges of almost all industrialized countries. A very interesting contrast is to be found in the French-Canadian farmers with their large families.

Thinly populated agrarian countries draw their labour wages mainly from the economic rent of the land—the differential rent of soil quality. They need only till the best land. A high output per day of work is the result. But densely populated agrarian countries can only exist by utilizing poorer land and by a modest standard of living.

Densely populated industrial countries must, in their efforts for self-sufficiency to which the will to survive forces them, also exploit poor soil for utilizing solar energy even at a heavy labour and capital outlay. Low yields per day of work are the consequence. A reasonable standard of living, comparing favourably with that of the urban and industrial population, is only possible with a correspondingly high price-level for agricultural commodities.

The alternative is not small or large farms, but achievement of a healthy rural population by means of the optimal form of economic organization of country-side and city. In this respect the nations can learn from one another. But each must decide for itself as to what must be considered desirable and possible. Countries with large reserves for food production, either at home or in colonies, will make decisions differing from those of nations lacking space and forced to compensate by hard work for the physical and historical handicaps of nature and fortune.

A. H. BROWN, *Northwood Farm, Hayling Island, Hampshire, England.*

I am rather surprised at my own courage in venturing to address this conference of economists, because I am not an economist but solely a practical farmer. I am, however, grateful for the privilege, and I shall talk to you in my own language, and not in the language of economists, on these matters which have been of very deep interest to me.

When I began to think over this subject for the purpose of making a contribution to this discussion, I wondered what there was to say specially about farm labour which did not apply equally to other labour on the one hand or to all those engaged in agriculture on the other. I have been so impressed with the way in which this subject is inextricably related to other questions which have already been discussed or are going to be discussed at this Conference that you will make allowance if I seem to digress too much into those other fields which, although separated for the purpose of discussion at this Conference, are, in fact, difficult to separate in practice.

Farm labour, it seems to me, is or should be in exactly the same

position with regard to social standards as every other form of useful work and more deserving of the highest rewards society can offer than many other forms of activity which are usually held in highest regard, as, for instance, banking and money-lending. Human life never did exist entirely without labour of some sort and without more particularly farm labour. Banking and money-lending, on the other hand, are of comparatively recent growth.

From the point of view of production of goods and services, I suppose in such countries as Great Britain, Germany, and other western European countries there is little real difficulty in raising social standards. The obstacles are the will to do it and the method, and of these I would put the former first.

You may all remember the following extract from the Report of the Nutrition Committee of the League of Nations published a year ago.

'Millions of people in all parts of the world are either suffering from inadequate physical development or from disease due to mal-nutrition, or are living in a state of sub-normal health which could be improved if they consumed more or different foods. That this situation exists in a world in which agricultural resources are so abundant and the arts of agriculture have been so improved that supply tends to outstrip effective demand, remains an outstanding challenge to constructive statesmanship and international co-operation.'

That is a very quiet and mild form of statement, and it is capable of a great deal more emphasis from direct examples on both sides of its claim. One cannot claim that it is a twentieth-century discovery, because one hundred years ago a great Englishman and writer, William Cobbett, denounced the 'fat' rickyards alongside the starving farm labourers. What a man he was and, if others like him would arise now, what vastly greater opportunities they would have for denouncing poverty in the midst of plenty!

The statement from the League Committee's report, while it quietly points out the two sides—the malnutrition on the one hand and the abundant agricultural production which has difficulty in finding a market on the other—does not mention the more glaring aspects of the problem. It does not, for example, mention that on the one side the cream of this tragic joke is that food-producers themselves are among those who are starving—or, to use the proper word, are suffering from malnutrition. On the other side it contents itself with saying that agricultural resources are so abundant and the arts of agriculture so improved that supply *tends* to outstrip effective demand. It does not mention two more glaring aspects: first, that

it is still thought to be necessary in many parts of the world to cultivate remote places, barren heaths, or mountains difficult of access and to try to maintain 'under-privileged'—to use a polite word which I have learned since coming to America—agricultural producers in these parts, when in many countries these places could well be left as parks and pleasure grounds for all; and second, that agricultural supplies have actually had to be diverted from human consumption—in some instances destroyed. I read last month that a percentage of the French wheat crop was to be used for the production of motor spirit. It is difficult to believe that in France every one has enough bread. In the coming world, I am sure, it will be thought a certain indication of social insanity in the twentieth century that crops were destroyed while literally millions of people were underfed.

So far, using the quotation from the League Committee's report as text, I have been dealing only with food. Standard of living, however, includes certain amenities—or rather in the modern world necessities—such as good houses with light, water, and sanitation, roads fit for motor traffic, proper schools and educational facilities, village halls and such like, and certainly adequate medical and dental facilities, the latter preferably as a public responsibility, because if you provide roads and schoolmasters and agricultural economists as a public responsibility and mainly at the public expense, why not doctors and dentists? I would also add that a great necessity which applies to town and country alike is a publicly provided all-in system of compulsory insurance; the present competitive system of insurance is wasteful and expensive. These are all necessities of a good modern standard of living, in western civilization at least. It ought not to be outside the capacity of modern productivity to provide them, and I would add that if for one reason or another it is considered advisable to use remote and unfavourable places for food production or anything else, these necessities of a modern standard of living should be made available for the people who have to live and work there.

But, in fact, these facilities are not available generally even in quite accessible and favourable parts of western Europe or, I imagine, in U.S.A. and Canada. Is this any more excusable in the presence of 'surplus' men and material than malnutrition when food production is plentiful? In Great Britain we have nearly 2,000,000 unemployed. Yet in my county of Hants water runs wastefully to the sea, while within a mile or two poor people have to buy water by the bucket in dry spells. That is not uncommon. Electricity

may be available in one village while in the next there is none—because it would not *pay*. Men have to be kept on relief instead. In my own district near Portsmouth, a city of 250,000 inhabitants, light and water are available as well as most urban amenities. But housing is a serious question. It is estimated that a million working-class houses are still needed in Great Britain, and, if we think in terms of really up-to-date standards with the provision of three bedrooms, decent living-rooms, and modern amenities, this is almost certainly a gross under-estimate.

As a side-light on this issue it may be interesting that among the people working on our farm at the present time we have the following distribution of size of families. There are 5 married couples with no children; 6 couples with 1 child; 2 couples with 2 children; 3 couples with 3 children; 1 couple with 4 children; and 7 unmarried men over 30 years of age. That means that for 24 men, 17 of them married and the other 7 over 30, there are only 23 children. That cannot be purely a matter of chance, and the reason I would give is the obvious and usual one, that neither the income nor the facilities are adequate for bringing up children. With a wage of 35s. per week plus a house, 4 or 5 children mean that there is 9d. per day per person to provide everything except the house.

The farm worker in my country has obtained some measure of minimum social standards. In addition to the legal enforcement of minimum wages, the recently introduced unemployment insurance scheme gives him, in the event of unemployment, a small income at a cost to himself—while employed—of 4d. per week. Under the compulsory health insurance scheme he gets, if he is sick, about 18s. per week and his widow a pension of 10s. per week with an additional 5s. for each child, with medical attention. Also for 2d. a week there is a fairly wide voluntary hospital scheme which gives free hospital treatment for as long as is necessary.

But a great deal still remains to be done to raise the social standard of farm labour to that obtaining in industry, or to the value of farm output. That is true for the average wage-earner in agriculture, and I would judge that in our country the average small farmer or small holder is not so well off as the wage-earner when account is taken of the hours worked by himself and the family labour. Edgar Thomas, of Reading University, showed in an article in the *Journal of the Ministry of Agriculture*, May 1937, that the average income per person on sixty County Council small-holdings in the counties of Hants and Dorset was £124, i.e. before any interest was allowed on invested capital. The average acreage of these small holdings was

about 50 acres, and the average capital invested about £10 per acre. By deducting interest at 5 per cent. on the average investment of £500, the small holder's income—his return for labour and management—came to less than £2 per week *per family* without regard to hours worked. By contrast, the average legal *minimum* wage as fixed by the Wages Committees for wage-earners in agriculture is about 34s. for 48 hours in winter and 51 hours in summer, where a cottage is provided. Not more than 3s. per week can be deducted from the wages for the cottage so provided. (Some cottages are not worth any more, but I know of cottages worth 12s. or so which are let to workers at 3s.) Bank holidays (i.e. the official public holidays like Christmas Day, Good Friday, Easter Monday, and so on) must be paid for at extra rates if the man is required to work. Stockmen receive anything from £2 to £3, and it is more and more becoming the rule for dairymen to receive a week's holiday with pay and a half-day per week, but this is not yet statutory.

These conditions which have been obtained for wage-earners in agriculture are not considered extravagant compared with employment in other industries. In fact, in spite of the progress made, farm workers are still being exploited more than other workers. What, then, can be said for the form of exploitation to which the small farmers and small holders and their families are subjected, if Mr. Thomas's figures are a fair representation of their financial position?

The exploitation of agriculture is not, however, confined to the wage-earners and the small farmers, and here I agree with speakers in earlier discussions that the problems of the social and economic condition of the agricultural population are closely bound up with the problems of the general social and economic structure. These contrasts—paradoxes—of malnutrition and over-supply of food, of inadequate modern living conditions and unemployed men and materials, are everywhere evidenced in the whole economic structure. It can, however, be claimed that agriculture has suffered at least as much as any part of the economic field. It may be due in part to the extra difficulties of adjustment to shifts in the economic and social structure and balance, but it is fundamentally due to the lack of will to be sufficiently thorough and drastic in our conceptions of what should be done.

The first charge on any industry should be the welfare, the social standard, of those engaged in it. Agriculture as a whole for more than a hundred years has been exploited and sweated in the interest of industry and finance. It has been done in the sacred name of 'Free Trade' which, reduced to reality, means freedom for the pirate,

the rule of the strong individual or corporation working for profit with no regard for human life.

In Great Britain, a great creditor nation, the people on the land are becoming more conscious of the exploitation of our agriculture in the interests of the bond-holder. We are becoming conscious, too, of the community of interest which we have in this respect with the great agricultural exporting countries, mostly debtor countries, who would also benefit by the reduction or cessation of the flow of bond-holder's tribute. Here I am probably encroaching on the discussion of International Trade which is on the programme later.

Because of the huge amount of foreign indebtedness (about £4,000 million—£5,20 million in the case of Canada to Great Britain alone), about half the exports of those debtor countries is tribute. Australia, for instance, year by year exports £60 million worth of wheat, wool, meat, fruit, &c., but only gets back £30 million worth of goods and pays £30 million in interest. That is an obvious main cause of a low social standard in the debtor countries, but it should be equally obvious that it is a main cause of similar conditions among the working population of the creditor country, because this flow of goods on interest account is not at the disposal of society as a whole, but is the property of a rentier class which is comparatively small. Since the produce has to be sold for currency, it is literally dumped on the market, breaking prices of those products in creditor and debtor countries alike. Also, to use again the case of Australia, the country which exports £60 million worth of goods can only buy from the creditor country £30 million worth of goods in exchange, and unemployment directly results in the creditor country in the industries producing the export goods. The position was evident many years ago in the case of War Reparations and the British debt to America, but I suppose it is politically and economically too dangerous to see it in the case of commercial long-term debts.

So long as the merry game of re-lending interest and exporting fresh capital went on, world trade continued, creaking at times, it is true, but the large debt-structure remained more or less intact. But as soon as foreign lending ceased the trade structure toppled over like a pack of cards. In essence it was the flood of tribute goods into Great Britain which upset the apple-cart. You in the great agricultural producing countries had people starving and bankrupt; we in the chief agricultural importing countries had the like. Quotas, tariffs, and all kinds of restrictive regulations are among the effects of the root cause I have pointed out.

My own view is that to attain a proper and general social standard, indeed to obtain ordinary justice, farm labour and agriculture generally must insist on an immediate reduction and the ultimate extinction of those parts of the debt structure which have ceased to serve a useful purpose. Just as reparations and war debts were a menace to stability and peace in the world, so, too, are huge debts, made very often on material and equipment long ago worn out. We must, if we are sincere, lose no opportunity of pointing this out. This conflict is with the purely pecuniary interests of certain individuals. It is not merely agriculture which is at stake. It is the uplift of entire peoples. A better social standard can only come for farm workers and the masses of industrial consumers by a better understanding of existing low standards and by a united effort to remove them. The interests of the two groups are identical. A high standard of living in the towns must and will give a high standard of living on the farm. I hope that the work of this International Conference of Agricultural Economists will be towards this end.

LUDWIG LÖHR, *University of Vienna, Austria, Germany.*

I have felt prompted to speak on this subject because it has special significance for my home country, Austria. By reason of the physical conditions in the mountains (these cover three-quarters of Austria), the rural population (one-third of the total population) is mainly engaged in grass-land farming, cattle-raising, and milk production. In spite of low imports of feeds, the demand for cattle, milk, butter, and cheese is met, but foreign imports of grain, especially wheat, are required. Among our 430,000 farms those of peasant type with a large dependence on family labour predominate.

The reunion with the mother country—the outcome of historical and racial development—is a turning-point in the history of Austria which will have profound and manifold effects on rural life. In recent years Austrian farming has suffered under a severe crisis in consequence of under-consumption and diminishing purchasing power of the rest of the population among whom unemployment was continually spreading. Limitation of agricultural production was the dominant note in economic policy. The output of sugar, milk, hogs, and other produce was restricted by production quotas; but with a fully maintained level of fixed costs such as taxes, maintenance of capital, insurances, debt-interest payments, &c., which could only be met by a sufficiently high level of output, the result of this restriction policy was an inevitable decline in the return for

the labour of the rural population. This was made evident by the abandonment of the mountain districts, which had now become sub-marginal regions, by increase of debts, by innumerable foreclosures, and by the greatest possible restriction of home consumption on the part of the farmers. Prematurely aged peasants and peasant wives, underfed children, and birth restriction are the external symptoms of the crisis to which the rural population in the mountains was subject at the period.

Thus, before the reunion with the Reich, Austria was a good proof of the statements made by Mr. Duncan. The standard of living of the workers in urban trades and industries far surpassed that of the farm workers. In so far as the latter were wage-earners, their income per working hour was far higher than that of the peasants themselves. The peasant was continually the object of praise and commendation; his great functions within the life of the nation were always being emphasized, but as a matter of fact he was living at the lowest level in the community.

These economic conditions have, however, been fundamentally changed since March of this year. Instead of restriction of production, we now have the greatest possible promotion of all production with unrestricted marketing in all economic branches. The whole economic system has been stimulated; in farming the restrictive quota system has been abandoned, and industries have opened up employment, thanks to large-scale state orders. To-day unemployment is virtually eliminated in Austria. Indeed, although this may sound surprising, we already find here and there a shortage of skilled workers. In certain branches of economy this fact is determining the pace of production.

Austrian agriculture is not unaffected by this new development, for the now fully employed industries and the public enterprises have not only absorbed all unused labour but are also attracting a great number of farm workers from the country-side because of the higher wage-rates. We are witnessing a rural exodus of unexpected proportions which cannot, as yet, be checked by increased wages, often amounting to 50 per cent. This signifies that anxiety about the marketing of farm produce has been replaced by the anxiety to procure adequate labour. These difficulties are particularly serious because the topography of Austria places very strict limits on the more efficient utilization of labour by increased application of machinery. We have perhaps to fear a development wherein the desired increase of agricultural production fails through lack of workers, as it previously failed through lack of markets.

What will happen when once state orders cease; or when the expansion in industrial centres must be reduced again? We will then have to face the danger that the experience described by Mr. Duncan proves true with us, namely, that the rural worker, once he has gone to industry, prefers unemployment to a return to farming. If our nation is to be and to remain a peasant nation, we must seek a balance between the agricultural section and the other groups of economy. We must strengthen the ethical ties of rural folk to the land by an adequate return for the labour of the peasants and by adequate comparable wages for the farm worker.

This confronts us with problems also common to the U.S.A. and Canada. The fact is that times of industrial prosperity accentuate the social problems, and are a menace to the standard of living of certain groups of workers, notably rural folk. I am gratified to find that at the present time agricultural income conditions are being studied in North America in a manner that gives me valuable incentives for my work at home.

LOWRY NELSON, *University of Minnesota, U.S.A.*

Dr. von Bülow and Mr. Duncan have given us a good general survey of the conditions and recent developments affecting wage labourers in agriculture. I trust it will not seem presumptuous for me to summarize briefly what seem to be the main conclusions of these papers.

In the first place, while he limits his discussion to wage-workers, Mr. Duncan reminds us of the extreme heterogeneity of farm labour including the child worker, the share-cropper, the local and migratory casual worker, the year-round employee, and the operator and his family. In the second place, we are reminded of the fact that farm labourers, in the matter of wages, hours of work, and level of living, compare unfavourably with workers in the industrial world. Nor have they benefited from social legislation enacted for industrial workers. Moreover, due to various factors, organization of farm workers for purposes of collective bargaining has not been conspicuously successful, although some progress has been made in Europe and the British Isles since the War. And finally, it has been made quite clear that the plight of the wage labourer is often no worse and in many cases better than that of the operating farmer, particularly those farmers on small or 'dwarf' farms.

About their general survey of the situation there can be no controversy. While the field of interest under discussion is one too long neglected by students of social and economic aspects of agriculture,

still the data available are adequate to support the conclusions made. And while much additional research is necessary to give an accurate description of conditions and to ascertain trends, almost inevitably our minds move ahead to consideration of policies which may have an ameliorative influence on what are quite generally conceded to be unwholesome conditions. It does not require painstaking study, when even a superficial ocular survey of conditions in the American south or the sea-boards is sufficient, to convince reasonable men that amelioration is necessary. But the answer to the question, 'How?' is not at all clear.

Mr. Duncan proposes that the difficulty can be met only by enlarging the farm unit. Already in our deliberations we have heard discussed the various aspects of this question of reorganization of agriculture to secure greater efficiency. Indeed, it is evident that in the United States this enlargement of holdings is going forward. But the census figures on size of farms indicate also a steady concomitant increase in the very small farms. In other words, it would appear that commercial agriculture on the one hand and subsistence or peasant farming on the other are becoming more sharply differentiated than ever before, while the family farm which partakes of the characteristics of both subsistence and commercial farming is scarcely holding its own—at least in relative importance to the entire agricultural economy. While it may be true that the enlargement of units may be the only basis on which industrial labour standards can be achieved in agriculture, it would seem to me at least to solve only a small part of the problem, while at the same time it brings new problems in its wake. The 'enclosure' of two or more holdings means the displacement of families. The increased mechanization which accompanies the 'enclosure' movement displaces additional labour. This process incidentally is taking place to-day on a major scale in the cotton area of the United States.

What is to happen to the displaced labourer? This is an old question—as old as the Industrial Revolution at least—but in our expanding economy with available virgin land the problem could be allowed to work itself out. To-day the alternatives open to displaced tenants, share-croppers, and labourers are not as clear, unless we are content with the alternative of 'going on relief'. Somehow these people are destined to find their way either into city industries or on to subsistence farms. As long as the city gates are closed to them, the only alternative seems to be that of wresting a livelihood from the land. I think, therefore, with Dr. Gray and Secretary Wilson that study should be given to the problem of rehabilitating

people where they are and on small farms, perhaps with some supplementary employment off their holdings.

While I agree that there are many difficulties involved and that the developments up to date in combined agricultural-industrial employment are none too encouraging, the fact remains that 30 per cent. or nearly 2,000,000 United States farmers did some work for wages off their farms in 1929. A survey conducted very recently of 3,000 sample farms in forty States by the Census Bureau in co-operation with the Bureau of Agricultural Economics (U.S.D.A.) shows that nearly one-third of these farmers did work off their farms in 1937 and, incidentally, reported a surprisingly large non-farm income amounting to \$573 per farm.

It may be appropriate at this point to call attention to another significant aspect of this casual employment of farmers in non-farm occupations, and that is the possibility that many farm operators and labourers alike may, through their industrial employment, qualify for benefits under some of the provisions of the Social Security Act from which at present they are explicitly exempted. This intertwining of agricultural and industrial interests is further evidence of Mr. Duncan's implication that agriculture cannot 'cut itself off from the rest of the community'.

The labour surplus in agriculture so far as the new world is concerned is increasing. The city industries which absorbed over six million people during the decade of the twenties have scarcely taken any at all since 1930. In fact, for a few years there was a slight back-flow to the land. The existence of this labour surplus in the country-side (I realize this phenomenon is not true in western Europe at the present time where the 'menace of the rural exodus' exists) is bound to have a depressing effect upon farm wages, and constitutes a potential threat to the labour standards of city industries. The point is that the enlargement of holdings and increased efficiency through technological progress may, as Mr. Duncan says, make possible the higher labour standards in agriculture such as shorter hours and higher wages, but the benefits will accrue to only a few of the labouring population. The question still remains as to what will happen to the uprooted labourer.

Another way by which it is hoped to better the lot of the labourer is through collective bargaining. This necessitates the organization of labourers for the purpose. Here the whole interesting question of what are 'social standards' comes into the mind. Obviously, Dr. von Bülow and Mr. Duncan assume social standards to mean such things as limitation of hours of work, minimum wages,

vacations with pay, and minimum provision for sickness, accident, old age, and unemployment. These are all familiar achievements for industrial workers.

When, however, we speak of social standards for farm workers, we must realize that we are dealing with traditions and folk-ways that do not recognize as yet such things as vacations with pay, limitation of hours of work, or the various benefits which have been written into law for industrial workers, or which have been achieved by them through collective bargaining. According to tradition, for the farm labourer to be 'worthy of his hire' he must demonstrate his physical and technical superiority. That tradition decrees that an 'honest day's work' can scarcely be squeezed within the limits of an eight- or even a ten-hour day. When the crops are to be gathered, the pressure is on to utilize all the daylight hours in the field, and then do the chores after dark. Even to suggest the limitation of hours of work is sufficient to stir emotions of resentment, or amusement, or both, not only on the part of the employer, but on the part of many labourers as well. It is a 'standard' which may exist on paper, if at all, but has no reality in the culture of farmers.

Similarly, unionization of farm labourers is not recognized by most rural people as practicable, and often not even desirable. As Mr. Duncan pointed out, so many hired men are young men, and, because they do not think of themselves as launching upon a life's career as labourers, they regard their status as labourer as only a stepping-stone to tenancy and ultimate ownership of land. There exists among them no feeling of class interest that must constitute the basis of unionization. Then, too, they are identified closely with the farmer's family with whom they live practically as members, and it is usually the case that they take the interest of the owner to heart. It is something of a shock even to suggest that he become a part of an organization which would set him off against his employer. Moreover, many of these hired men are sons of other farmers in the same community, and to join a union is tantamount to identifying themselves with an organization with which their own families can have no sympathy. And since the man's own ambition is to be a farm operator himself, he can scarcely be interested in the promotion of a union with which in time he may have to bargain in his future capacity as farm operator. Of course, unionization of the 'hired man' in United States agriculture is not yet a reality, and the points indicated are at least a partial explanation of that fact.

Attempts are being made currently by the two large rival labour organizations in the United States to unionize farm labour, and I

have no doubt that considerable progress will be made, particularly among migratory workers. It is too much to expect the movement to be entirely spontaneous with the workers themselves, but ideally that should be the case. An organization superimposed from the top down is not likely to be lasting, and may not take sufficient account of the local attitudes of labourers and employers alike. Unless organization is geared to these attitudes and can be content in its action with evolutionary processes involving considerable time, ruptures and premature social stratification of the local community may result, and little real progress achieved.

Since the rural folk-ways and the emergency character of much farm work do not permit as yet of setting standards on the length of the working day or the working week in my country, it is necessary as well as expedient that much educational work be done to modify the tradition and achieve better management of farm work in general. For it is desirable that some reasonable reduction in hours of work be achieved. For one, I should like to see any benefits in this direction extended to the farm operator's family as well as to the wage labourer. It is undoubtedly true that through wiser management, better planning, and organization of the work on the farm, the necessary work could be accomplished by a much more reasonable length of working day than we have at present. I know of a pious community of farmers who were opposed to Sunday baseball, and who adopted a weekly half-holiday, even in the busy farming season, in order to allow the young people to have their baseball on a weekday and thus prevent what to them was desecration of the Sabbath. I doubt if any one could say that the community was any less prosperous as a result of this innovation. While I suspect that Sunday baseball has triumphed by now in that community, there was at least a demonstration that farmers can enjoy some recess from work if they have the will to do it.

Similarly, it is questionable if increased returns are gained from inordinately long hours of work. Most of us who grew up on farms, I am sure, recall the lowered morale that results from working from dawn until dark in the fields, doing the chores after dark, and sitting down to the evening meal by lamplight. And after that the farm housewife has the dishes to wash and the kitchen to tidy up before her long day is over. Surely the farm women could be interested in shortening the workday to a more reasonable basis.

The third, and perhaps the most important, means of raising social standards for farm labour is legislation. Dr. von Bülow has pointed to the progress which has been made since the War. Many

governments, however, in legislating for agriculture as a whole have not specifically taken into account the interests of the wage-workers. This has been true for the United States, although the Sugar Act of 1937 is an exception. This Act authorizes the Secretary of Agriculture to set wages which are to be paid for hand labour in the production of sugar-cane and sugar-beets, prohibits child labour under fourteen years of age, and limits to eight hours a day the work of children from fourteen to sixteen years of age. These provisions are mandatory for those farmers who would participate in the benefit payments under the quota provision of the Act. But the fact that in the United States there are more than two million wage-earners in agriculture should be a sufficient reason for giving special consideration to their interests when agricultural policies are being determined.

The conclusions are that social standards now embedded in the rural culture pattern are far below those already accepted for industry; that it is by no means clear that agriculture can afford higher labour standards without government subsidy, which Mr. Duncan decries, but which many who are familiar with the long history of subsidies to other industries may not be so ready to deprecate, so long as social goals are served by those subsidies. It would seem that raising the conception of what constitutes desirable labour standards is a process to be achieved in large measure by education, and by extending those standards to the farm operator and his unpaid family labour. This education must precede effective organization of workers and constructive legislation on their behalf.

MERCER G. EVANS, *Labour Relations Division, Resettlement Administration, Washington, D.C., U.S.A.*

I have noticed that every English-speaking person who has spoken on the question of farm labour has introduced himself with an explanation that he is not an agricultural economist. I shall have to join them. The fact that we have all made apologies for not being agricultural economists may be of some significance in the English-speaking countries, because of the fact that, perhaps, the agricultural economists have felt called upon to study the question of farm labour only as it was incidental to the problems of farm management.

In my associations with agricultural economists I have been quite interested to note that, for the most part, they have considered farm labour only as an item of expense. The farm-labour supply has been, more or less, an assumed factor. In a sense it appears that the labour factor of production has been considered as a reservoir into which

all the problems arising from the other factors of production might be dumped. The flexibility of the labour relationship has caused it to be looked upon as one which would permit adjustments for any difficulties arising from other, more inflexible, relationships.

During the last two years it has been my job to attempt to establish labour standards on a number of farming projects which have been initiated by the Farm Security Administration in the United States. In my dealings with agriculturists, concerning questions of farm-labour standards, I have found the general attitude among them to be that farm-labour relationships were quite different from industrial-labour relationships. It has always been pointed out that special conditions attach to farm-labour relationships; that the element of seasonality, for example, is such as to make it impossible to treat farm labour in the same way that urban labour can be treated. There has always been an assumption, moreover, that farm wage-rates were a direct dependent variable of farm income and that no wage standards could be established because of this functional dependence. Consequently, it has always been assumed that farming was an occupation which could not sustain any labour standards which any one would be willing to set up. I also found in many quarters the point of view that the interests of farmers and their farm labourers were one as against the interests of urban people, including urban labour, and that there was such a conflict of interests between all the farm population and all the urban population that there was no possibility of approaching the question of farm-labour relationships from any experience that we have had in the industrial field.

From my brief experience as a labour economist working in the field of agriculture, I have formed the impression that the differences between farm-labour problems and urban-labour problems are not nearly as great as we have generally assumed. The change in farm organization that is taking place in certain parts of the country is creating a relationship between a single employer and a number of employees, which is very similar to that which has, for a long time, prevailed in urban relationships; and the displacement by mechanical developments, in several parts of the country, of that type of farm labour which is represented by the share-cropper, and the wage hand who becomes a member of the farmer's household, is creating a labour surplus which is resulting in social problems of considerable importance. The number of strikes in agricultural occupations which have occurred in the last few years is evidence of the weight of these problems.

I have recently had two experiences which may be of interest with regard to the assumptions of the peculiarity of farm-labour relationships. The first relates to the assumption that the seasonality of farm labour creates a labour-demand situation which is not amenable to the application of labour standards. I had presented to me some time ago a chart for farming operations on one of our projects in which the peak labour demand was three times the minimum. The persons who had developed the farm plan were asked to rework it because of peculiar reasons which required that there should be a fairly constant demand for labour throughout the year. They came back with a farm plan which was just as economic as the first one, but which showed a difference between the minimum and maximum demands of labour of only about 40 per cent.; that is, the maximum labour demand was only about 40 per cent. above the minimum labour demand.

The other incident which I would mention involved a strike of farm labourers on a large farm employing approximately 1,000 workers. I was asked to investigate the strike. The strike had occurred presumably as a protest against a reduction in wage-rates. After much discussion with the employees, I was very much impressed to discover that none of them mentioned the reduction in wage-rates as a matter of importance. The strike, which had come about in the absence of any labour organization, had occurred apparently because of an accumulation of things which had stirred up unrest among the workers; the reduction in wage-rates was merely an excuse on the basis of which the strike could be called. Matters of housing, of sanitation, of water-supply, of hours of work, of discipline, and other minor things were the real cause of the strike. This circumstance called to my mind the fact that in industry it is very generally the minor grievances which create difficult labour problems, and it seemed to indicate that it is just as important for agricultural employers to give consideration to employee relationships and to organize those relationships, as it is for industrial employers to stabilize their employment relationships and to establish machinery for handling their labour problems.

Regardless, however, of the size of the farm or of the development of mechanization, I do not see that there is any fundamental difference between the nature of urban-labour problems and of farm-labour problems, or of the approaches to them. In urban employments, regardless of their size, there is always a desire on the part of the employer to have his labour relationships as flexible as he can make them. He would like, also, to have his capital relationships

and his rent relationships on a flexible basis. The organization of the capital markets, however, has tended to create inflexible relationships with regard to the hiring of capital. *Rentiers*, whether they control factory or office sites, patents, mineral rights, copyrights, trade names, goodwill, or other vested interests or monopolistic rights, have succeeded, to a very large extent, in establishing an inflexible control over their payments for hire.

Through the organization of labour and labour legislation, urban workers have succeeded, to a considerable degree, in establishing inflexible controls over the hire of labour. It is the fact that this is the last of the flexible areas to be removed that causes such intense hostility on the part of urban employers towards labour organizations and labour legislation. In the face of all of these inflexibilities, the urban employer, when faced with a change in his market conditions, finds it necessary to meet the situation primarily with a change in his schedule of production, and, in the last analysis, makes partial accommodation for other inflexibilities through the curtailment of employment; so that urban labour, despite its organization and legislative protection, continues to be one of the first factors of production to make concessions to meet changing market conditions.

In agriculture, farm labour has not received the protection of established standards, and changing market conditions are immediately reflected in changing labour relationships. The absence of labour standards makes it possible for employing farmers to adjust their labour relationships without curtailment of employment. Whereas in urban employment wage-rates tend to be maintained and the total wage payments are paid to a much smaller number of workers, in rural employment farm incomes fall, and the total payments are spread over approximately the same number of hired and self-employed workers.

This type of analysis may be applicable to the problems discussed earlier in this Conference. There was much talk concerning the surplus of rural population, and various proposals were offered for the accommodation of the surplus. Mr. Wilson proposed that the surplus be accommodated by means of subsistence farming and rural industrial communities. Mr. Taylor proposed that the surplus be accommodated through migration to the fringes of urban employment. Other Americans, in interesting contrast to the Europeans, have suggested the migration of the rural surplus population to the cities. As Mr. Bean pointed out, however, under conditions as they now exist in the cities, little accommodation could be provided

for additional workers from rural areas. Even the suggestion of migration to urban occupations in villages and small towns, as made by Mr. Taylor, would be of limited availability and of temporary significance; for, either the newly trained craftsmen would be enticed to seek the higher standards offered by city employment, or they would operate as poorly qualified craftsmen and, in a sense, as outlaws in the urban economy.

In the final analysis I suspect that, while production is geared to a low scale of operations, the essential problem is one of a surplus rural population and a surplus urban population. In the cities, through unemployment, the surplus is made to appear as a surplus, and various means are found to care for the people in some sort of fashion. In the country the surplus is not made apparent, and we talk about marginal producers and subsistence farming, while an effort is made to scatter the whole farm production over the total rural population.

This condition probably cannot long continue, for the displacement of farm workers, whether share-croppers, wage hands, or working farmers, induced by crop curtailment programmes and mechanization, and accompanied by employment conditions on large-scale farms which are not dissimilar to urban conditions, will shortly bring the rural surplus of population so prominently to our attention that we will have to look for specific methods of meeting the problem. A reorientation of our thinking will inevitably occur. When we have reached this point we will undoubtedly find ourselves ready to acknowledge the similarity of rural and urban employment problems, and willing to give consideration to the establishment of labour standards for farm employment in the same way that we have established labour standards for urban employment.

In the meantime, may I add, I do not believe that any proposals for spreading the current farm production among all the rural population are fundamentally significant; or that the proposal of widespread migration to or from the city is economically sound at the present time. If, as Mr. Ezekiel suggested, we can get our scale of production geared up to the point where it can sustain on acceptable standards nearly all of our people, migratory adjustments will occur, without the necessity of much encouragement from our social institutions, and with the minimum of economic friction. Judged by present trends, there will be increasing inflexibilities in both our urban and our rural economic organizations. The efforts to establish unique forms of economic organization in our rural areas will

probably prove to be generally significant only as they increase the physical efficiency of farming operations, or as they provide adaptation of farm organization to the patterns that will be demanded by economic trends.

G. STOCKMANN, *University of Tübingen, Germany.*

I wish only to make a few remarks which will supplement what has been said by Professor Seedorf and perhaps by other speakers. The point with which I would like to deal is the selective effects of migration from rural life, which result from the social conditions of the rural population in Europe, particularly central Europe and Germany. These countries have been densely populated for a very long time; the peasant holdings are usually small, one main reason for which is that formerly these farms functioned as self-sufficient domestic units and did not need much land for the purpose. The layout of these peasant farms, particularly the layout of the fields and of the farmstead, is very often inefficient. Formerly this unfavourable layout was not such a great problem as it is now. It was formerly necessary and customary in all vocations to work long hours from early morning to late in the evening, and even then the labour return was low in all economic activities.

That has all changed in the course of the last two or three generations to the disadvantage of farming. In other trades and professions, and particularly in industry, there were far greater possibilities for mechanization and organization of the enterprise, and therefore in these other branches productivity of labour was more powerfully stimulated than in agriculture. Thus it became possible to depart from the 12- or 15-hour day and to introduce the 8-hour day in industry, and it was further possible virtually to eliminate child-labour, and partly also women working in industry. Apart from the lesser opportunities of mechanization and of organization in agriculture, there are numerous other reasons why the productivity of peasant labour was retarded in these old European countries.

As it is, even to-day in central Europe not only must the peasant toil from early morning until late in the evening, but the peasant's wife must be not only housewife and mother but also the main assistant of the peasant in his work, especially on the smaller farms.

These conditions have had very harmful consequences, especially in the post-War period, on the hereditary force of our rural population and for the retention of our rural folk in the country-side and in their traditional vocation. The peasant himself has to work harder than the industrial worker, although he finds some compensation in

the fact that he enjoys the higher social status and the slightly greater degree of independence which goes with the ownership and management of a peasant farm. The peasant wife, however, is usually more burdened with work; she is indeed completely overburdened on many peasant farms, and certainly far more burdened than the wives of artisans or industrial workers. We are, therefore, now confronted with the situation, and it is a very dangerous and serious one, that the best and most capable daughters of peasants usually have no inclination to become peasants' wives. I was told in a peasant village of south Germany that there were about fifteen to twenty young sons of peasants all willing to take over their farms, but who were looking in vain for capable peasant girls whom they might marry. It is especially the case that the most capable and most talented daughters of peasants leave the land to take up professions in the cities, or they marry civil servants, tradesmen, or skilled workers in order to find an easier life. Migration from the land is nowhere so apparent as among those peasant daughters, particularly among the more talented.

We find that the rural exodus is more general among the more talented and capable of the young generation of the rural population. That is not based on mere supposition, but is a fact well supported by evidence from recent village studies that have been carried out in various parts of Germany. In these studies the attempt was made to distinguish the later professions of the talented children and of the less-talented children. We found the evidence as to their capacity in the reports of the village schools, and it was found that these school records were a sound basis for estimating the capabilities of these children in later life. The main question was to find out what became of the more valuable part of rural youth.

The result of the studies was to establish the fact that the more efficient and talented mainly migrate from their country homes to the town, and from peasant vocation to urban and industrial professions. There is evidence of this for a number of communities in Germany both in the north and in the south. It is interesting to discover that this migration of the more talented youth varies in volume according to the land tenure of the villages. The greatest migration, for example, is from villages composed almost solely of labourers and where those farm workers have no land of their own. Conditions are better in this respect in west, south, and central Germany, where the farm workers mostly own or rent land. Migration is also slightly less in the villages where it is the custom of the peasants to divide their land among the heirs, although here

it is still difficult and very laborious to build up a farm by purchase or tenancy of land. It is more easily possible where the farm is given undivided to one son. In such places a comparatively greater number of the talented youth stay on the land and remain peasants, as the social prospects for the son of a peasant are relatively high. It is especially the case that many of the more talented remain on the land where there is an established system of succession, according to which either the eldest or youngest son takes over the farm. But even from such villages usually the talented migrate more readily than the less talented and the less active.

In these studies it was found that the migration of the cleverer children became particularly marked after the growth of industrialization and after working conditions were improved more in the other professions than in farming. The migration of the cleverer children—and that means negative selection from the rural population—has already been going on in part for two or three generations, especially in districts where there are industries to absorb the talented rural youth from the peasant farm.

There is every reason, as we are well aware, to combat this menace. A great proportion of our agricultural measures are at present, and will be in the future, directed to this problem. The problem is to raise the standard of living, that is, the real income of the peasant family, and above all to relieve the peasant family of overwork, and especially to free the wife from work on the fields and in the stables so that she can return to her true sphere and be the housewife and mother of the family. This is no easy task. We have a high degree of intensity in German agriculture, and the productivity of labour is low. We cannot consolidate our peasant farms by twos or threes into larger units for the reason that we wish to maintain a populous, vigorous, peasant section as the biological basis of our nation. We will have to follow the path of co-operative mechanization in order to rationalize field operations. We must above all continue to eliminate strip farming. We have very many farms whose lands are split into a great number of parcels, and this in itself excludes the use of machinery and causes much loss of time and energy by the great distances between farmstead and fields.

The problem of ways and means of solving the difficulty are so intricate that I cannot enumerate them all. Let it suffice to mention two: Great significance must be given to the professional training of peasant youth, which has been promoted strongly since 1933 and should in future receive even more attention. We hope that we will succeed, not only through this professional training but also by

general education and by a general improvement of conditions of life in the country-side, in retaining the more valuable portion of our rural youth on the land, and thus ensure the future of our nation. The law of hereditary farms (*Reichserbhofgesetz*) will contribute to these ends because it protects the peasantry against excessive debt-encumbrance and excessive interest-payments, and thus provides to the peasants and their families the opportunity of improving their social standards.

F. WINDIRSCH, *German Division, Agricultural Council, Czechoslovakia.*

Mr. Duncan's paper was extremely interesting, but his suggestions can only in very few cases be adopted in central Europe. He mainly deals with the position of the farm labourer. When he points out that it is necessary to raise the social position of the farm worker by granting higher wages, then we must, at least with respect to the conditions in our country, say that higher wages are mainly a question of higher prices for farm products. Under our conditions this price problem is not always easy to solve, for the development of grain prices has always been the object of political conflict, as I know only too well.

Mr. Duncan also mentioned the length of the working day. I would point out that with respect to the small and medium-sized farms in our country there are no limitations. The farmer and especially his wife work all day long and have no time to lay their hands in their laps, for, if they did so, they would lose their means of existence.

Mr. Duncan also said that there is much in farm-labour conditions—he was no doubt referring to England, America, and Canada—that awakens in women an antagonism against farm work. In our country we can confirm this, but it would be a dangerous development if this feeling were to gain ground, for the woman is one of the most important factors in agriculture under our conditions.

I would like now to make some general remarks on this subject. My observations do not refer to the farmer but to the peasant, in the European sense of the word, who one generation after another does his work on the same soil, even under sometimes unfavourable conditions, and whose work is calculated not merely to gain monetary profit but to retain that same soil for his family under all conditions as their home. To gain that end the real peasant must exercise the strictest economy, which has become his second nature. He will restrict all expense for his own living as far as he can, so as to be able to put something by for lean years, for unforeseen

events, and for investments on his farm. Then he must put money by for the second and third sons who have to leave the farm to find other means of earning their living. He must also think of the years when he has handed over his farm to his son and he and his wife have retired. The extent of these voluntary restrictions is influenced by custom and tradition which may be those of his family only or of all the peasants of the same village or district.

His standard of life finds its expression in his clothes, his food, his habits, to whatever extent he has a part in the inventions and institutions of our civilization, and it is influenced by the size of his farm and his surroundings. Under normal conditions the standard of life must be influenced by the size of his farm, but even a rich farmer will be very modest in his ways of living. The more so the small farmer whose farm renders only small profits, hardly enough to defray the costs of living for him and his family in good years. It is worse if bad times cause a dwindling of his profits and if a succession of bad years swallows up all savings and even plunges him into debt.

In this respect agricultural life in Czechoslovakia varies greatly according to the varying conditions of the country, consisting of plains, hilly districts, and mountains, and extending over 13 degrees of longitude from west to east. In the western part of the country the standard of life is quite high, so that the standard of the peasant is influenced thereby, although the altitude, the transport facilities, the type of farming, the nearness of markets, and the size of the farm cause certain differences. The quality of the soil is, of course, of the greatest importance. In the eastern part we find very primitive conditions: the mountains, the smallness of the farms, the bad conditions of traffic, the difficulty of bringing the agricultural products to market, the character and stolidity of the people, incredibly modest in their ways of living, the lack of interest in matters of culture and civilization which in many places is shown by the fact that there are no higher schools. All these conditions unite to produce a very low standard of living which is shown in the prevailing poverty.

If these peasants can retain their homesteads at all, it is not only on account of their incredibly small demands on life, but also through the assistance that the agricultural population of these parts has frequently been granted by the State; for instance, by distribution among them of seed grain, seed potatoes, forage for their cattle, and so on. It is certainly to be doubted whether a repetition of this assistance will put the agricultural population of eastern Czechoslovakia in a position to guarantee the fulfilment of their political

and economic duties, because in this case we cannot speak any longer of independent landowners but only of an agricultural proletariat. These people are only of value for their numbers in the politics of the State. How to make them really independent and how to raise their standard of life is an important problem in itself.

For the comparison of standards in agricultural life all countries ought to institute research into the various conditions of living. It would not be easy; for in agricultural life many things used cannot be expressed in money values, whereas the statistics on the standards of living for workmen and employees can express everything in dollars or shillings and pence because they form part of a financial system expressed in wages and salaries; even in the case of payment in kind the values are fixed in all districts.

But in spite of all these difficulties we should try to find means and ways to express the values in the standards of agricultural living statistically, even if these statistics can only be approximate in view of the fact that conditions of production and markets vary from year to year and with them the standard of living for the peasant.

S. HIGGINBOTTOM, *University of Allahabad, India.*

Indian farm labour is a very great problem for a number of reasons. First of all, there is the system of caste which precludes certain people from working as farm labourers. In many parts of India the Brahman and other high-caste people may not touch the plough. At the other end of the social scale, if you send a sweeper, that is the man who cleans up the human excreta in the village, or if you send a *dom*, that is the man who removes the dead bodies, or if you send certain other low castes into the fields to work, the caste people will promptly leave and say, 'We cannot work with that man—caste prevents it.' Then again there are in India a great many casual landless labourers living in the villages. At the Institute farm at Allahabad we are close to the city. There is a large glass factory and a sugar factory, lots of work on the railways, so that there is in our immediate neighbourhood competition for casual landless labour. When the time comes for work to be done in the fields, either at sowing time or harvest, this casual landless labourer is compelled to work for the landlord. These men may be earning in the city or with us 6 annas a day, i.e. 12 cents, but they are compelled to work for the landlord in the village for a wage seldom exceeding 4 cents, i.e. 2 annas, a day.

One of the greatest difficulties we have with this labour at the bottom is to get it to stand up for its rights. I have seen men with

broken arms, broken collar-bones, severely bruised, because they said to the landlord, 'Why should we work for you for 2 annas when we can get 6 annas somewhere else?' The landlord says: 'You belong to this land and you must work here.' Seeing a man with a broken arm, I said to him, 'If you will speak the truth in the court, I will secure you a lawyer.' He said, 'For God's sake don't, sahib. You know you are only here for a little while, the landlord is here all the time. It isn't that I would suffer alone, but my family would suffer.' Unfortunately, in India a great many of these people are little better than serfs. Apart from the handicap of caste, they are not free to sell their labour in the best markets, and so the whole problem is made exceedingly difficult. If we could only get some of these people to bear witness in the courts, then, I think, the position of the labourer would be improved, but he is too afraid that the Government will not be able to protect him, and I fear that his fears are well founded. The Indian people have ways of doing things which the Government is not able to combat. There are ways of squeezing the poor people, and these people suffer very much from that.

In the Ganges valley, where we have, I think, the densest agricultural population, averaging anywhere from 500 to 1,500 per square mile, we find that farmers seldom work more than 80 days in the year. A great many of them do not work more than 60 days. Their oxen seldom have more than 60 days' work. Where the farmer does most of the work and only needs outside labour at special times, the labourer seldom gets more than from 30 to 50 days, and these are the people that suffer terribly. They are the ones that eat raw millet and think that life is all right if they can only get enough of it. In our part of India, of course, the hog follows the human because of this millet diet of the poor people, which takes the place of the hog following the corn-fed steers of the west. It is difficult to see how you are going to make progress with the villager—this casual labourer—so in terror of the landlord and the employer above him. He will not stand up for his rights. It is exceedingly difficult to help a man in that condition. Various people who have studied the matter say that, in spite of all that the British Government has done (and I think the British Government is always on the side of the poor man), it has not been able yet to get his courage up to the sticking-point where he will stand up and bear witness in a court of law against his oppressor.

Because of the low standard of these people, of course, the whole of India is kept back. My observations in India have led me to believe

that poverty is in direct proportion to the amount of hand labour used. The reason is that the hand labourer, with the inefficient tools that he has, produces so little more than will support himself. Hand labour produces the minimum of surplus without which, of course, we can have no rise in the standard of living. I would like to take 30 per cent. of India's population off the land and put it into industry, and I would like to introduce farm machinery, because that is the only way, as I see it, to raise the standard of living. I am familiar with much that is said against the introduction of farm machinery because it takes jobs away from these poor people. They put up railway embankments, millions of cubic feet of earth, in India without any modern earth machinery. This is how it is done. The man takes his *pharwah*—a sort of large hoe—and fills a basket which is lifted on to the head of a woman. The great Victoria dock at Calcutta was dug that way. I cannot conceive of any worse form of drudgery than the present hand labour of India. It is degrading and debasing, most of it, to the people. It is not the kind of labour that earns respect for the man who does it. We have got to create some sort of a consciousness of his own worthwhileness, and that is what he does not now have. My remarks, I am afraid, are turning back to the discussion earlier this week on the social implications of economic progress, but one cannot escape it in India. You think you are dealing with an economic problem, but, lo and behold, it turns out to be caste or some religious belief or doctrine, and it is the social customs growing out of these religious beliefs that put the barrier in the way of any economic progress.

The subject is really so big that all I have been able to tell you is that it is difficult. There are many people in India who are alive to the present position, and who realize that no country can rise economically when there is as large a proportion of its people at the bottom as India has to-day. I would not like to leave the subject on a note of pessimism. There is a sense of awareness in India to-day among the caste peoples—an awareness that something must be done for those at the bottom—that fills me with hope.

C. Y. SHEPHERD, *Imperial College of Tropical Agriculture, Trinidad, British West Indies.*

I have been invited to say something to you about farm labour and social standards in the British West Indies. These tropical islands comprise Jamaica, where the bananas come from, Trinidad, famous for its pitch lake, the Barbados, and the Leeward and Wind-

ward groups of islands. These islands have very little in common except their differences, and it is extraordinarily difficult to generalize. The majority of the islands are dependent almost entirely on agriculture. For 250 years sugar was the only crop of importance. During the past fifty years or so numerous equally unprofitable export crops have been developed. Examples are cocoa, bananas, coconuts, cotton, lime, grape-fruit, and many others. It is customary for each estate to be devoted to the production of a single commodity. Most of the crops require some cultural attention throughout the entire year, but there is appreciable seasonal variation in the demand for labour.

In most islands the great majority of the labourers are the descendants of negro slaves imported for the good of their souls from West Africa. In Trinidad and British Guiana indentured immigrants were imported from the congested districts of India to remedy the shortage of labour caused by the abolition of slavery. Individuals of both races were torn away from the social anchorage to which they had been accustomed and deposited in countries of alien traditions and customs. The predominantly male character of the slave trade and indentured immigration engendered a laxity in moral codes and family ties which still persists. The abundant supply of labour and the ease with which slaves, or later indentured immigrants, could be obtained prevented any pressure on employers for improvements in working conditions. Indentured immigration, it is true, was conducted under Government supervision, but the minimum requirements of the immigration ordinance were very low and tended to become the standard for all other labourers. The labourers of both Indian and African origin were, and still are, provided with free accommodation in long wooden barracks partitioned into small rooms each 10 by 12 feet. Each estate, or group of estates, employing indentured labour was required to maintain a hospital with the necessary staff and equipment. Labourers under indenture were entitled to free treatment and maintenance while in hospital, and this privilege was usually extended to all other labourers. Wages were extremely low. Men and women received only 25 cents, or a shilling and a halfpenny, for each day actually worked during their five-year period of indenture. Indentured labourers could not leave the estate for employment elsewhere without the consent of the Protector of Immigrants. They could be compelled to work as and when required by the employer and at any kind of work he cared to choose. Other employees found it necessary to conform to these conditions in order to retain employment.

With such abundant cheap labour there has never been any recognized obligation for the employer to provide, or for a labourer to accept, regular employment. The work is still allocated almost entirely by the task or the day. The annual earnings still remain very low. The records of several hundred men showed an average of only a hundred dollars per annum. You cannot hit many high social spots with an income of only £20 a year.

About 90 per cent. of the food consumed is imported from Great Britain, Canada, or the United States, and, since it has to bear heavy freight charges and is subject to import duties, you will realize that diets are deplorably deficient and defective. According to accepted nutritional standards, the majority of the agricultural labourers should have been dead long ago. There is a very close relation between the earnings and physical incapacity, and more than 90 per cent. of the field labourers are infected by hookworm. Malaria and other debilitating diseases are widespread. Now these diseases are primarily economic in their origin. Europeans very rarely suffer from hookworm for the simple reasons that they wear shoes and usually have daily recourse to certain sanitary conveniences which I need not specify. Malaria is readily prevented by the elimination of the anopheline mosquito's breeding-grounds and the use of mosquito nets. But the cost of these elementary precautions is beyond the means of both employers and employees, and so the labourer is involved in a vicious circle of disease, low earning power, and a deficient and defective diet.

There have been many changes during the past twenty years, some for the better and some for the worse, but mainly for the worse. Indentured immigration ceased in 1917, and with it went the necessity for the provision of medical practitioners, medicines, and hospitals by the estates. The Government medical service is inadequate to remedy this deficiency, and many diseases which readily yield to treatment are allowed to reach an acute and dangerous stage. The barracks and dwelling-houses have fallen into a disreputable state, and, although some companies have inaugurated rehousing programmes, their financial resources preclude any rapid or adequate rate of improvement. Emigration to the United States, Cuba, Panama, Venezuela, &c., which provided a safety-valve for the more thickly populated islands, has ceased, and many West Indians are being repatriated. These individuals and those who served overseas during the War became accustomed to a standard of living which they abandoned with reluctance on their return home. Labourers are no longer tied to one particular estate, and the motor-bus has

given them greater mobility. Educational facilities are now widespread, and here, as I am in Canada, I should like to pay high tribute to the excellent and selfless work done by the Canadian mission schools for the education of eastern Indian children in particular.

The education has branded discontent with the deplorable conditions of the working class. Unfortunately there has been no recognized and constitutional channel through which groups of labourers could obtain redress of their grievances. The rapid expansion of the oil industry in Trinidad has provided employment for thousands of labourers at wages double and treble those obtained on nearby estates. Housing, sanitation, and facilities for amusement and recreation are greatly superior on the oil-fields to those available in the agricultural areas. Nevertheless, it was the oil-workers and not the less fortunate agricultural labourers who resorted to violence last year in order to secure a rise in wages commensurate with the increased cost of imported food. Both the sugar and cocoa industries have received assistance from the Government, but this has been possible only because of the industrial and commercial development of Trinidad. In Barbados, which has a population of a thousand to the square mile, dependent almost entirely upon the sugar industry, and in most of the other islands, it is impossible to subsidize agriculture at the expense of another industry because there is no other industry.

The Government is adopting a policy of more active intervention in matters affecting the welfare of the agricultural labourer. Labour advisers have been appointed to bridge the gulf between employer and employee. The formation of trade unions is receiving encouragement. Employers recognize the desirability of improving the social standard of the labourer, but can do little so long as agricultural enterprise is conducted at a loss. Unfortunately, there appears little prospect of improvement in the prosperity of the sugar industry. Since the War highly industrialized countries have been faced with problems of rural unemployment and distress, and they have turned with almost one accord to the industry which provides the least employment at the highest possible cost, namely, sugar. The door to the natural market of the West Indies, namely, the United States, was banged, barred, and bolted many years ago. England, the mother country, has now developed a substantial beet-sugar industry; Australia and South Africa have heavily protected cane-sugar industries. Every year has witnessed a contraction in the market for West Indian sugar and increasing pressure on the social standards of the West Indian labourer. Every time you jump up to present

your farmers with a sugar-beet on a silver salver you unwittingly press the head of the West Indian labourer further into the mire.

At the first of these International Conferences I stated that if the British West Indies had received the same financial assistance as the beet-sugar industry of Great Britain they could have afforded to give away their sugar and still declare a dividend of 100 per cent. per annum on the invested capital. Cost of production has since been reduced as the result of scientific investigation, cost accountancy, mechanical devices, and sacrifices of labour, but sugar prices have fallen even more rapidly. Two centuries ago the British West Indies were the most favoured possessions of the British Empire; in fact, with the Treaty of Paris in 1763, it was seriously debated whether Great Britain should retain Canada or the microscopic French Island of Guadeloupe. They kept Canada. Of course they did not know all that we know to-day. The voice of the British West Indies is now seldom heard in the councils of Empire, and the social standards of labour are dictated by the politicians of the industrial countries of the world.

PAVEL P. EGOROFF, *Statistical Institute for Economic Research, University of Sofia, Bulgaria.*

In Bulgaria, much more than in any other European country, the social standard of life of the whole country depends on farm labour. Of a population of 6,000,000, 80 per cent. are on farms. Less than 10 per cent. of the total population are employed in industry and handicrafts. The characteristic feature of the 885,000 Bulgarian farms is that they are small in size and typical family farms. Of 2,500,000 people occupied in agricultural production only 50,000, or 2 per cent., are permanently hired workmen, and around 150,000, or 6 per cent., are hired for a short time, mainly at the harvest time.

These figures give an idea of the extent to which the welfare of the Bulgarian people depends on the results of farm labour. We cannot say that the social standard of the Bulgarian farmers is as high as those in western Europe and particularly in the Scandinavian countries.

In modern civilization the general standard of living is measured principally in physical terms; a low or a high social standard of any nation or some groups of one nation is a consequence of its economic development. Four hundred years of dependence on Turkey and two wars during the past sixty years of national freedom are the basic reasons for Bulgaria's very slow development. Until the last decade 74 per cent. of the cultivated land in Bulgaria was under

cereals—principally wheat and maize. As a result we had inefficient use of farm labour and very low income per man.

With the depression of 1929 and the severe fall in the prices of cereals on the one hand and on the other the yearly population increase of more than 80,000 persons after the World War, necessity for improvement in economic conditions arose in very acute form. What were the possibilities of the country improving these conditions? The insufficient and unsuccessful attempts to discover raw industrial materials prevented, and continue to prevent, the development of our industry. The scarcity of land convenient for utilization does not permit the extension of agricultural production on the basis which we had a few years ago. Only one factor of production—farm labour—is abundant. Even at present more than 30 per cent. of the farm labour is surplus to our requirements. This surplus can neither be used in industry nor go abroad. Our deep conviction is that there is only one means which may reasonably be expected to help us to increase the economic welfare of Bulgarian farmers and to improve their social standard. Reorganization of the farms on the basis of a better and fuller utilization of the farm labour is now the principal task of Bulgarian agricultural policy. Introduction into our agriculture of more labour-intensive crops like fruit, grapes, vegetables, cotton, sugar and feed beets; increase of poultry, swine, dairy, and cattle production; these are questions which the Bulgarian farmers must solve with the help of their close advisers—the agricultural agencies.

In our mind not a compulsory reorganization of the farms but one accepted voluntarily by the farmers themselves is the best way to reach our goal. To this end more than 500 farm advisers are working in the country now, and 200 agricultural winter schools for the farmers' children have been established during the last eight to ten years. We are glad to say that the results of mutual co-operation between the farmers on the one hand and their advisers—the Ministry of Agriculture with a large number of organizations—on the other become more evident from year to year. A slow but sure rise of the social standards of Bulgarian farmers through a better and fuller utilization of their labour has been noticeable during the last few years. We hope that this standard will be raised still more in a not far-distant future.

J. F. DUNCAN (*in reply*).

The temptation is very great to open my note-book and go over a good many of the points which have been made in the discussion.

But that would mean inflicting another speech upon you, and you have given my paper so kindly a reception that I do not want to damage that impression.

The discussion we have had has ranged very widely over the world. I am particularly glad that we had the contributions from the West Indies and from India, because, however depressing the conditions are in India and in the West Indies, these happen to be the two places which have shown that there is among the coloured populations a human movement developing very much on the lines that have been followed in the white populations. Unrest in India and strikes in Trinidad are merely indications of the kind of movement to which we have become accustomed and to which, in the more advanced democratic nations, we are now attempting to adjust our social standards. I want to impress that point upon you because, however much we may talk about these social standards and about what has got to be done and so on, we have got to take account of this fact, that we are dealing with the most fundamental urge in the whole human race. These submerged peoples will not be content to be submerged. We know it within our own states, within the white races. It is becoming quite clear now that the coloured races, whom we have dominated and exploited much worse than the industrialists have exploited our working people, are not going to continue to be exploited and will insist on having some human consideration also. You have got to remember that fact.

But for this feature the discussion to-day would have depressed me very much. We have all been so completely in agreement. Whenever that happens, it means that we are all quite willing to recognize the evils and the difficulties, but—but—but . . . Now whenever people begin 'butting', it gets my goat. It reminds me of Tolstoy's phrase: 'We are all willing to do anything for the peasant except get off his back.' We are all anxious to do something for agriculture. We are all anxious to have standards, but for heaven's sake do not let us upset things as they are to-day! And how are we going to get these standards if we do not upset things as they are to-day? Let me use the old illustration. We have got to break the egg before we get the omelette, and we are all very anxious to see the omelette there, but none of us is anxious to break the egg. The general drift has been: 'Yes, we must have all of these things for agriculture. We must have changed standards for agriculture as for other people, but agriculture is not able to afford them. What are the possibilities that some other body can afford them? If some other body will pay

the price we are quite willing to do something.' The point is: What are we prepared to do ourselves? Mr. Ezekiel put the point, and I agree with him, that we are not going to solve this question as a purely agricultural question. That was the point referred to in Mr. Evans's contribution too. It is a big problem, and the agricultural problem is simply one phase of it. We have got to solve it by attacking along the whole line, but I am not going into that to-day. What I am going to say is that it does not relieve us of the responsibility of doing our job in our own field, whatever we may be doing elsewhere.

Now as to these standards, obviously we have the two lines: It is necessary to have either some reconstruction of our whole method of agriculture so that we can afford to bear these, or some attempt to secure these standards with the present organization of agriculture. To those of you who are inclined to think you can apply social standards to independent small operators, whether peasants or farmers, I would suggest that you consider the problem—as economists. I am asking you, not as politicians, not as sociologists, but as members of the economic conference, how practically you can apply standards of that kind to independent owners or tenants. You have had some experience in the United States of relief work. I believe part of the relief has gone to farmers. We have had some experience of unemployment insurance going to the small holders and their families, and I can see extreme difficulty. This method of security has been formulated to suit wage-earning, which is based on employment, and to which you can apply the test of an offer of employment. It is far from easy to apply it to independent operators who are paid on the basis of profits and private enterprise. In one part of Scotland 'farming the dole' is very much more successful than farming the land at the present time. We discover the danger of easy money when we are handing it out in small sums. It is very demoralizing to hand out a few dollars, or a few shillings, to an unemployed man or to a person needing relief. It is extremely exhilarating when this easy money comes in millions with no more effort than in drawing the dole. You will find these difficulties if you try to take social standards which have been designed and built up on the basis of wage-earning employment and apply them to independent operators in agriculture.

I am going to sum up in this way. We are all agreed that we must raise the social standards in agriculture. We are agreed that these standards, however they are framed, must apply not only to

the wage-earners in agriculture, but to all those who are of a labour standard, whether they are independent operators or tenants, and so on. We may be agreed—here I think the agreement may bring doubt to some of us—that it is possible to improve the position within the present structure. I think that any study of wage-rates within the last thirty years in any of the European countries will show that it has been possible to increase simultaneously both the standard of living of the workers and the productivity of the industry. You will find a direct connexion between the two things, and I am still convinced that there is very considerable room for improvement even within the present structure of the industry. Low wages and long working hours are a continual incitement to slackness in management and to easy-going methods of labour. Labour is only economically used when it is costly. Time is only economically used when you have not too much of it. But as long as you continue with too much time and too cheap labour, they will be wastefully employed. In that respect there is a considerable amount of slack to be taken up at the present time.

I submit, however, that within our present structure we cannot make very drastic improvements, and drastic improvements are certainly required in many parts of the agricultural field. The problem I wish to put to you as economists is: If the analysis is correct that we have these trends in our society at the present time; if these trends have behind them a human demand, which, as far as we can trace over the course of the centuries, is a growing demand, a strengthening demand; if there is a growing conscientiousness in the minds of all the people that we must, as part of the machinery of a great state, provide for these social standards; if society decides that there are certain ends to which it wants to move; the job set to the economist is to outline the best way in which we can develop agriculture so as to secure the most economic use of the resources *within* the circumstances and towards the ends to which we want to move. You will not solve it, and we do not ask you to solve it. The sociologist will come in and say that the economist and the economic sanctions are not the only ones or the most important ones. The politicians will come in, and they will have all sorts of aims. They will say that, irrespective of what the cost is going to be, we must maintain a certain number of people on the land. The sentimentalists will come into it, and all other kinds of people will have a say. But the job of the economist is to advise on the economics of operations within the given framework and for the specific purpose. Give us your advice as economists and let us see

what it is worth and what it is likely to mean. Your advice as sociologists and your advice as politicians is worth just as much as that of other people, and you are quite as much entitled to give it—not as economists, but as citizens. When you are asked (here I am just repeating what I said at St. Andrews) for your advice as economists, do not give us your advice as politicians and refuse to face the economic issues.

INTERNATIONAL TRADE IN RELATION TO AGRICULTURAL DEVELOPMENT

FIRST OPENING PAPER

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BECAUSE of a misunderstanding I received the request to give an opening address on this subject just a few weeks before sailing. Under these circumstances it would perhaps have been better not to venture upon this task, but the request was so urgent that I could not resist, and so I have put my ideas on paper, not as a base, but as an exordium for a discussion.

Free trade, in the sense that every one is able to buy all his requirements where they are cheapest to obtain, whereas every seller is able to dispose of his goods in the place where he can get the highest prices, probably never existed. Although after 1850 various countries recognized the principle of free trade, in nearly every country the production of certain goods was promoted artificially. Before the World War this was generally done by imposing a duty on imported goods and by allowing export bounties and subsidies on products to be exported. Next to this, however, many special ways of protecting home produce were found. I need only point to the many ways in which the home production of sugar in almost every country was advantaged and to the disabilities on the importation of live cattle, nominally to prevent contagious diseases being introduced, but in reality with the specific intention of reducing competition of foreign cattle or of excluding them entirely.

In spite of these measures to protect home produce, an extensive trade in goods all over the world was to be observed before the War of 1914. This trade not only took place on a large scale between neighbouring countries, but many articles, especially agrarian ones, such as wheat, corn, rice, sugar, &c., were dispersed in large quantities over the globe. They formed the base of world trade, against which other parts, especially Europe and the United States, exported industrial goods.

After the War, however, we observe everywhere a further development of the endeavour to produce the necessary requirements primarily or entirely at home. Next to and backed by political

nationalism, economic nationalism is developing with the undertone of a conviction that in case of war it is of the utmost importance for each country to be independent of imports from other countries with regard to the principal requirements. Even mighty England is developing the cultivation of sugar-beet within her own boundaries at the cost of high subsidies.

To advance international trade and especially export trade as much as possible, almost every country enters into bilateral treaties, whereby the favoured-nation clause, whether combined with a differential tariff of import duties or not, is generally applied to promote exports. Whilst this procedure was at first satisfactory, more and more ways and means have been thought of, especially since 1920, to make the consequences of the favoured-nation clause inactive without open discrimination. A well-known example is the live cattle trade of country A with which the countries B and C each have a trade agreement including the above-mentioned clause. If born in mountainous districts, the cattle are subject to a comparatively low import duty, but if born in lowland districts are liable to a high duty. In the case of country B, for instance Holland, which is all less than 300 feet above sea-level, the favoured-nation clause is respected *pro forma*, but by the above-mentioned differentiation is suspended *de facto*.

Thus for every country the necessity arose of entering into a separate trade agreement with each country with which trade relations are maintained, stipulating quantities to be imported or to be exported and the terms on which this may take place; this was especially the case after the general introduction of the quota system by which imports above certain quantities are prohibited. The negotiations about these agreements show the truth of the old adage that, in order to be able to export, one has to import as well. Many countries are obliged to lower high import duties on goods which can be produced at home, or to enlarge low quotas, because otherwise the opposing party cannot be expected to open its frontiers to the exports of the first country.

A new and important element in this development is the fact that gradually more and more countries are compelled to prohibit or to restrain the export of gold and of international currency. This leads to the so-called *clearing-treaties*, so that in principle claims from country B on country A can only be paid for with claims from country A on country B. From the free commercial relations between these countries nothing remains, and the governments consult together about the quantities of the various goods to be imported

and exported. For the sake of the stability of the exchange of one of those countries, or of both countries, the trade between them by means of clearing is usually fixed on a lower level than would be the case without difficulties in exchange. Taking this into account it is not surprising that, especially after 1929 when because of the depression the governments of all countries were obliged to take steps to prevent the collapse of their production-system, world trade volume has diminished sharply. If, because of the drought, the United States had not been compelled to import wheat and other foodstuffs, the decrease of the trade volume of these products would probably have continued even during 1935 and 1936.

As a result of the endeavour of many countries for agrarian autarchy the changes in the volume of international trade in foodstuffs probably have a more permanent character than the decline of trade in manufactures. According to the *Commerce mondial de la Société des Nations* the course of foreign trade in four of the most important countries (Great Britain, the United States, Germany, and France) reads as follows (1929 = 100):

	1932	1933	1934	1935	1936
Foodstuffs . . .	89	83	82	85.5	85.5
Raw materials . .	81.5	87.5	88	91.5	95.5
Manufactures . .	59	60.5	66.5	69.5	75.5

As to the gold value of this foreign trade the following figures are given (1929 = 100):

	1932	1933	1934	1935	1936
Foodstuffs . . .	46.5	37.5	34	34.5	36
Raw materials . .	36	35	35	36	39.5
Manufactures . .	37.5	34	33	33.5	36

It stands to reason that only the *government* of a country can decide about the conclusion of a trade- or clearing-agreement. In this respect the interests of different parts of the population are often diametrically opposed to each other. As a rule the producers insist upon the restriction of the import of an article, and many a time, indeed, the government is willing to allow the import of small quantities only, especially for the sake of employment in its own country. The first difficulty is that in this event a government will often come into conflict with the interests of large groups of consumers who have great political influence.

Moreover, all the drawbacks of the Mercantilism of the seventeenth century then arise, viz. that many final products of one branch

of industry are raw material or aids and appliances for other sources of prosperity. If a country restricts its imports too drastically, it causes damage to the interests of industries and branches of agriculture producing for export. These exports as a rule diminish automatically in the same proportion as the imports in a given country are restricted. Therefore a compromise has usually to be made between the various parties. In such a case it is impossible to reckon with all interests in the same proportion.

In view of the interests of national defence, of fighting unemployment, as well as of the maintenance of essential industries and branches of agriculture, it cannot be prevented that those who produce for export and those who engage in international trade or shipping are often damaged in their business. In my own country, for example, the import of nitrates, formerly as a rule supplied by Germany, is restricted. Nowadays Germany supplies less nitrates, and consequently our export to Germany under the clearing treaty has diminished; and because the exports of my country to Germany consist almost entirely of agrarian products, whereas the import of industrial goods is restricted, the export of agrarian products suffers. On the other hand, I have a vivid recollection of the indignation of parties concerned with the glass-industry in my country when the Government admitted a large quantity of bottles in order to be in a position to get rid of a large surplus of vegetables.

Of which products have the exports to be restricted? This is one of the problems which will eventually cause the greatest difficulties to governments if a just and proper arrangement is to be made. It is impossible to indicate lines along which this problem can be solved *internationally*, as each country has to take account of its own national position from a social and economic as well as from a political point of view.

In my country the products are divided into three groups, i.e.:

- (a) the industrial products;
- (b) the agrarian products;
- (c) the colonial products.

The aim is to maintain the export of each of these groups in equal proportion; for this purpose the export during a certain basic-period (in this case 1933-4) is taken as a starting-point.

Apart from the fact that this method might work rigidly and is therefore undesirable, there are other reasons as well why the desired proportions in the export of various products cannot always be reached or maintained. In this respect it is not the exporting country alone which can decide. The country which imports also takes

a hand in these transactions and very often is not interested in the products which the exporting country has to offer. The result being a compromise, the interested parties can no longer judge whether the negotiators for the government have tried sufficiently to obtain the best possible export quotas for a certain group of producers. This leads to jealousy and dissatisfaction, especially when export difficulties increase.

When the economic structure of a country is not complicated, or when a country exports only a limited number of products, as is the case with many young and colonial countries, it is probably possible to make clear to the parties concerned that the negotiators endeavour to look after all interests in the same zealous way. But in other countries, particularly in many West European countries, where the interests of industry and agriculture are very diverse, many difficulties arise. This year, for example, the government of my country, where cattle-breeding forms the most important branch of agriculture, had to allow the import of beef, notwithstanding the fact that our cattle stock has been restricted artificially, because without a restriction we would have far too much meat. It is not surprising that under these circumstances the need for importing foreign beef is not understood by most people. The reason was that at the time we had a large surplus of other agrarian products. In order to be able to export these products we had to accept that an article which we can produce abundantly ourselves had to be imported. In this case, therefore, the interests of producers of cattle and arable products conflicted with each other. Also horticulture, which in my country forms one of the most important groups of producers of export products and whose interests have been badly hit by the economic crisis, has to be supported often at the cost of cattle-breeding and agriculture.

In those countries where people have the liberty to stand up openly for their interests in newspapers or in meetings and to criticize the policy of their governments these conflicts of economic interests often give rise to sharp expressions of dissatisfaction. As a rule this dissatisfaction is concentrated on the government. Actually this is a drawback of a government being mixed up in the conflict of interests between the various groups of citizens. Their dissatisfaction could go so far that the foundations of the state would eventually be endangered.

Those who wish to prevent their country running such a risk are of the opinion that the government's interference in private trade and free production should not be more than is strictly necessary. Besides, it will be wise for the government to publish the lines along which

it intends to regulate trade policy, in order that every one will be convinced that this policy is justified in the interests of the country as a whole.

In countries which have had an old-established and a well-developed trade the handicap caused by the measures and the restrictions of the government is generally felt more than in countries which for the greater part are self-supporting and therefore have little foreign trade. For a small and densely-populated country where agriculture and horticulture, up till 1929, depended to a great extent on an export trade, the consequences of the international trade restrictions are, of course, much more serious than for large and more thinly-populated countries, such as, e.g., Germany and U.S.A. For countries producing mostly agrarian products of which only a few sorts are exported, the problems, although they may be severe and not easy of solution, will be less complicated as a whole.

All measures which have been taken by governments in order to minimize the effects of the agrarian crisis tend to diminish the volume of international trade and to make it follow a different course.

It is clear that as a consequence of imperial preference the sources of United Kingdom supplies of cereals, butter, sugar, bacon, &c. are changed from what they were before the Treaty of Ottawa. Moreover, this country, Canada, has experienced the grave consequences of the fact that the European countries which formerly bought American and Canadian wheat in large quantities now try to support themselves. The endeavours of the governments of the Provinces and of the Dominion to extend as much as possible the trade of their principal product—wheat—have not met with the success, either for Canada or for the States, which so many farmers had expected.

In 1936, at the Conference at St. Andrews, Mr. Cairns of the Wheat Advisory Committee in London gave an opening address on 'Commercial Policy and the Outlook for International Trade in Agricultural Products'. The speaker restricted himself principally to the prospects of the international wheat trade, concerning whose future he was not at all optimistic. Many speakers after him shared his opinion, although some of them were more optimistic. I think the latter have been wrong and that the revival of the wheat trade and wheat prices situation in 1936 was not a sound and natural one; it was more a reaction to too drastic restrictions in some countries, combined with a series of very dry years in North America and with an effort of war-fearing countries to replenish their stocks which had

diminished too severely. In the last two years we have, as a matter of fact, perceived little of a general revival of free trade. Also in the near future I presume that we shall not see much of it. The number of countries which for social or political reasons do not wish to expose their own producers, and particularly their farmers, to the competition of foreigners is increasing rather than diminishing. If I am not mistaken, in Europe the view that a farmer is not to be considered only as some one who cultivates a plot of land, on which wheat or potatoes or sugar-beets are grown, is gradually gaining ground. Countries wishing to maintain a farming class in order to build up a firm social structure of a powerful nation cannot accept free trade, now or perhaps ever.

Another complication is caused by the fact that bit by bit in various countries widely diverging price-levels are to be observed. Whereas formerly articles could be consigned to different countries with about equal profits, it is no exception that an article nowadays can be exported to a certain country at large profits (provided the seller has an import licence, of course), whereas the export to another country can take place only at a loss. Of course, we cannot expect private business to export at a loss. If, therefore, a country wishes to maintain its trade with its old relations as much as possible, it is often compelled to call into being an official or a semi-official institution which will take off the cream of excessive export profits in one case and allow export premiums in other cases.

The present trends still point to a tendency towards further development in the direction of government interference and government control. In 1936 the Prime Minister of my country took the initiative for a more liberal traffic between various countries of western and northern Europe. The larger European countries did not join this so-called Treaty of Oslo, and, although at first, in the beginning of 1937 when the situation showed an improvement, the prospects for the treaty theoretically looked rather favourable, the new depression in 1937 so much increased the opposition against a renewal of the pact in 1938 that it has been discontinued.

The efforts of the Belgian Prime Minister, Mr. Van Zeeland, who visited the principal countries in Europe and also the U.S.A. in order to examine the possibilities of enlarging international trade, have had no results either. For myself, I do not see that individual initiative, either industrial or agricultural, will have more freedom in the near future. Whatever may be the opinion about the principle of 'planning' in economic life, circumstances lead to it. As long as co-operation between the various nations is as small as it is now,

such planning can only be effected on a national basis, whereas internationally it will not be a success. The results of the International Sugar Conference which was held in London in May 1937 will confirm this.

The conclusion of my considerations cannot be other than that the volume of international trade in future will diminish rather than increase, especially because of the many difficulties which in the whole present world are weighing upon agriculture.

INTERNATIONAL TRADE IN RELATION TO AGRICULTURAL DEVELOPMENT

SECOND OPENING PAPER

HENRY A. WALLACE

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IT is of peculiar significance for citizens of the United States and Canada that this Conference of International Economists is being held this year in Canada. For over a hundred years the relationship between these two peoples has been on a high plane, and we hope the whole world will some day attain to that fine spirit which characterizes the understanding between them.

At the First International Conference of Agricultural Economists, held at Dartington Hall in early September 1929, I had the pleasure of presenting a short paper entitled 'Relation of the Tariff to Farm Relief in the United States'. That was just before the world-wide depression broke. To-day, nine years later, in again presenting a paper before this Conference, I have been invited to discuss the closely related subject—'International Trade in Relation to Agricultural Development'.

When I gave my paper nine years ago I was a private citizen. To-day, as it happens, I am an official of the United States Government and have been charged by our Congress with responsibility for administration of our national farm programmes and policies. Therefore, although I am speaking in a neighbouring country and before an audience composed of persons from all parts of the world, I am naturally inclined to discuss my subject from the standpoint of our own experience in the United States. I hope you will understand that in discussing our own experience in considerable detail, I do so because it has an important bearing on world affairs.

At the 1929 meeting, before the United States had completely stopped her loans to Europe, I pointed out the impending danger to international trade in these words:

'Reduced loans to Europe inevitably mean trouble for the agricultural products of which we have an exportable surplus unless we in the United States are prepared to accept manufactured goods in large quantities.

'From the standpoint of world welfare, it would seem that there are several things which can be done to benefit United States agriculture without harming agriculture elsewhere, namely:

'1. Gradually reduce the United States tariff on manufactured products to a reasonable level, taking into account the post-war reversal in credit balances.

'2. Work for international stabilization of the general price-level.

'3. Devise some scheme of giving to agriculture the moral, legal, and economic equivalent of what the corporate form of organization has given to industry, and yet maintain the family-size farm.'

In retrospect the comment which was made by Professor Ashby is interesting :

'I would like to point out to English and American economists that some part, at any rate, of the peculiar conditions in British farming in the latter years before the war, and in the years since the war, have been due to a reversal in financial conditions. From about 1850 until the early part of the century, Great Britain poured capital into other countries of the world. That process of lending and sending out goods as loans cannot go on for ever, and in the years just before and since the war we have begun to get back interest and repayment of capital; mainly in food supplies and raw materials which the British farmer can produce.

'In part, it is this process of reversal of credit that is producing unemployment. So closely is this subject linked up with national and political interest that it is almost impossible to get any clear statement or detailed information. If America is ready to continue making loans, the higher they pile up loans the more they will have to suffer. The idea of using a system of taxation to redress some injustices needs close consideration. Nearly all political parties have been converted to the idea that we should use a system of taxation to put things right when they go wrong in the sphere of economic distribution.'

In 1934 I took advantage of my position as Secretary of Agriculture of the United States to embroider the theme which I presented to the agricultural economists in 1929 in England. In a pamphlet entitled *America Must Choose* I urged the people of the United States to face the significance of the rapid reversal which had taken place in credit balances between the United States and the outside world. I pointed out that our failure to bring in new imports to make up for the cessation in capital payments to other countries would eventually put out of use 50 million acres of American crop land which had been producing for the foreign market. Recognizing that the psychology of our people would not permit any sudden change in our tariff, I suggested that the practical outcome might be some middle path. It is such a path which I believe America has chosen and is attempting to follow so far as the rest of the world will permit.

We all recognize, I think, that the large, irregular, and often abrupt capital movements which have characterized post-War international

economic relations have placed a great strain on the capacity of productive activity and trade to adjust themselves. Naturally that strain is much greater when a large part of international trade has been stopped by almost insurmountable barriers to the movement of goods. In the case of the United States the strain not only brought about the need of increased imports but also tended toward decreased exports. Until 1933 the United States Government resisted the pressure for larger imports by imposing new and higher tariffs. The result was that practically all of the strain had to be relieved through a decreased market for our exports, including especially the great export crops which have been the leading products of American farms.

Now that our country is following a middle course, we are meeting the strain by two co-ordinated lines of attack. On the one hand, we are judiciously adjusting to the forces making increased imports desirable, by reducing our tariff where that can be accomplished without damaging domestic industry. In exchange for these tariff reductions we are obtaining concessions from foreign countries in their barriers to trade in our export products. On the other hand, we are organizing agriculture in such a way as to adjust supplies to reasonable market potentialities. Before I discuss the relation of these two programmes to each other and to progressive agricultural development, let me say a word or two about another line of attack which is much discussed as a possible way of relieving the strain I have mentioned.

I refer to the apparent belief of some 'old-dealers' with a liberal slant that we can go back to the dear dead days of the past simply by getting rid of governmental restrictions, perhaps financing our exports again with large foreign loans. Those folks have been quick to forget the lesson of our 'lending twenties'. They apparently choose to ignore that experience of Great Britain which Mr. Ashby pointed out to this Conference in 1929 and the painful experience of the United States which followed so soon after. It is amazing that only six weeks before the beginning of the world-wide depression he should have said, 'If America is ready to continue making loans, the higher they pile up loans the more they will have to suffer.' In retrospect I suspect the only change Mr. Ashby would make to-day in his statement would be to say, 'If America is ready to continue making loans, the higher they pile up loans, the more *both they and the world* will have to suffer.' International capital movements apparently are subject to sharp changes in amount and direction. The strain of the adjustment to such changes is wellnigh unbearable not only for those like us who must either increase their imports

or decrease their exports, but also for the debtors who must either increase their exports or decrease their imports.

And yet I suspect that Mr. Ashby would agree with me that moderate international loans by a wealthy country with high productivity need not be embarrassing, provided they are made in contemplation of certain types of goods coming back to the country in question as payment of the loans. When a civilization is young and rapidly growing, the principle whereby the older, richer regions loan to the new and backward regions seems to work very well for a time. If the commodities whose production in the new region is financed by the loans are really needed by the world in increasing quantities, and if the older region is willing to use the interest and amortization payments on the loan to increase its purchases from outside its borders, the whole scheme may work out very beneficently. It will be particularly so if the new regions change from net-borrowing to net-lending or net-repaying countries very gradually over a considerable number of years. But if the loans are made for non-productive purposes and then stopped when their service becomes difficult, or if they are made to foster the rapidly increased production of goods which, because of unbalanced wage, price, and tariff policies, cannot be marketed successfully, the ultimate situation may prove to be very disillusioning. The loans which nationals of the United States made to the outside world during the decade of the twenties were used to a considerable extent for purposes which were either non-productive or resulted in the increased production of goods already abundantly available. Furthermore, the United States appeared unwilling to use the payments on those loans for increased purchases from abroad.

To outline the eventual role of the United States in world affairs is not within my sphere, nor does it come within the scope of this paper. At the moment we in the United States still have a tremendous distrust of the 'isms' and the 'balance of power politics' of Europe. From the European point of view our attitude may be unreasonable, but nevertheless it is very real, and it must be reckoned with by every prominent federal official in the United States, no matter what his own personal convictions may be. Any external lending policy of the United States in the future will probably be directed towards countries not dominated by the 'isms' which we consider so unreliable. It seems a little doubtful, however, whether the United States during the last sixty years of the twentieth century will care to duplicate the experience of Great Britain during the last sixty years of the nineteenth century. Some of the elements are present for so

doing. It is possible that we might benefit the world if we pursued a course similar to that of Great Britain in the nineteenth century; nevertheless, I see very little indication at the present time of our doing so.

One important element which is lacking for such a course is a group in United States society corresponding to the British ruling class. That group had at least a semi-realistic understanding of the relation between world trade and domestic economy, and of the role which they wanted England as a whole to play in world affairs. Our experience of the twenties demonstrated the amazing inadequacy of the group which then served us as financial and political leaders. For example, members of this group patted themselves on the back for cutting down the federal debt, but for every dollar of reduction in that debt they increased local governmental debts by a dollar and private debts by six dollars. With insecurely based loans this futile and thoughtless leadership blew a bright and shining bubble of domestic and world prosperity. The American people have not forgotten how the bubble burst and what followed its bursting. Those who look for large foreign loans to finance our exports and take us back to the 'good old days' are probably reckoning without their host; for I see very little indication at the present time of the United States pursuing such a course.

Let us return, then, to a consideration of the middle course our country is following and its effect on progressive agricultural development. We are using the mechanics of the reciprocal trade agreements to bring about as rapid an increase in imports as can be allowed without causing substantial damage to domestic interests. At the same time, recognizing the obvious fact that these agreements could not be counted on immediately and completely to restore the foreign market for the volume of farm products which we exported in the early years of this century or in the decade of the twenties, we have been developing forms of agricultural organization designed to bring about an adjustment between our exportable supplies and the quantities which we can market abroad at a fair price.

We have completed trade agreements with eighteen countries. We are negotiating with four others, including the United Kingdom, most important both as a market for our farm exports and as a supplier of our industrial imports. Upon the successful conclusion of an agreement with the United Kingdom we shall have agreements in effect with countries which take about 55 per cent. of our exports and supply about 52 per cent. of our imports.

The effect of these agreements in lowering our tariffs and restoring

our foreign markets is extremely difficult to measure. Because of the complicated nature of a modern tariff, and also because of the great variations which occur in the prices of imported commodities, it is not possible to measure the aggregate reduction in our total tariff structure, or in any particular tariff schedule, by any simple formula. Such studies of the question as have been made, however, indicate that the Trade Agreements Programme may thus far have resulted in reducing the average tariff paid on all dutiable imports of manufactured products by as much as 10 or even 15 per cent. If the Trade Agreements Programme did nothing but lower some of the extremely high tariffs of the Smoot-Hawley Act of 1930 and the foreign trade barriers that were raised in retaliation, it would be worth while. Actually there were many schedules in previous tariff laws which were greatly hampering international trade, and these too have come under scrutiny and been modified where possible and desirable. Most of the effect which this reduction has had on our foreign markets for farm products has been obscured during the past three or four years by the great effect on our trade of both droughts and fluctuations in industrial activity. With the completion of an agreement with the United Kingdom and the return of normal weather conditions, the importance of the tariff reductions will be more readily apparent.

The Trade Agreements Programme is the best method of making tariffs that the United States has ever had. Changes are made only after careful consideration of all the interests involved. The process is necessarily gradual because it is *honestly* scientific. In that programme the farmers of the United States for the first time have a tariff-making process in which their interests are adequately represented instead of being dismissed with such meaningless 'protection' as the tariffs on corn and wheat and our other regularly exported farm products.

It must be remembered that those charged with the conduct of the Reciprocal Trade Agreements Programme are up against the mercantilist attitude towards trade which predominates in the present-day world. That is, each nation wants to expand its exports and cut down its imports. Every one wants to sell. None wants to buy. The favourite method of trying to bring about this impossible result is the quantitative limitation of imports. That method is more effective in throttling trade (a country's exports as well as its imports, of course) than is even the highest tariff. Nations following such practices can only with difficulty be brought into an effective trade agreement.

Because of that situation a very probable result of the programme will be the effect of the most-favoured-nation policy on international trade as a whole. By generalizing concessions under this policy each agreement opens the way to increased trade not only bilaterally between the parties to the agreement but also multilaterally between all of the countries of the world. It is a fundamental fact of international trade that it cannot prosper when forced into constantly shifting, narrowly channelized courses. Secretary Hull never loses sight of this fact; and, by insisting on the most-favoured-nation policy, we are giving international trade a chance to develop toward a higher level on a sound basis.

One further factor which must be considered in an evaluation of the Trade Agreements Programme as a method of reducing tariffs is the political effectiveness of the small, short-sighted, minority pressure groups who are out to defend their own particular tariffs at any cost and by whatever means they can find. This will continue to be a tremendous political obstacle to Democrats, Republicans, or any other United States political party in the effort to bring about any reduction in our tariff rates, either by reciprocal trade agreements or in any other way. Activity of these groups makes it difficult to admit enough imports to enable the outside world to pay us the interest on its loans and at the same time have enough left over to buy the volume of goods which the United States was accustomed to export during the decade of the twenties.

To me this definitely means that the United States is literally driven to choose either the path of isolation or a middle path. Of the two I prefer the latter. Under a middle path programme agriculture does its full share in the effort to restore the foreign markets which can be obtained for it through our Trade Agreements Programme. We recognize that these markets help us both directly as an outlet for our surpluses and indirectly by restoring prosperous conditions among United States industrial workers who form our principal market. We do not turn our back on the world by any means. We believe in efforts to recreate a world economic community. But we recognize the realities of the post-War situation and do not fool ourselves as to the volume or the nature of the foreign market which can be created for our products in the immediate future.

There is, of course, another important factor which can ameliorate the situation. I refer to the possibility of complete industrial recovery in the United States. The recent decline of industrial activity in our country greatly decreased our imports and has thus limited foreign purchasing power for our exports. With the revival of

business courage now being evidenced, the new government recovery programme, and the improvement which appears to be under way in the housing cycle, our industrial production seems likely to increase materially over the next year, possibly over the next two or three years. Should it reach a peak index of, say, 135 (on the 1923-5 base) it might mean an increase of as much as a half billion dollars annually in our imports (even if price levels remain the same). This would be in addition to gains under the Trade Agreements Programme. The effect on our exports would probably be of about the same order. Such a development as that would not completely offset the need for the control of agricultural supplies, but it would moderate the degree of limitation needed and hence greatly lessen the difficulties of operating the programmes.

Some critics in our country say that it is inconsistent to lower tariffs and at the same time to control domestic supplies. Actually the two are parts of a single structure. They complement each other in the effort to arrive at a complete adjustment to the situation created by the shortage of foreign purchasing power for United States goods. It is as though the War and post-War developments in trade and finance had created for American agriculture a great chasm. To bridge this chasm the Trade Agreements Programme builds from one bank a span. The nature of that programme is such that it builds well but slowly. Under the various agricultural adjustment acts we in agriculture must each year, by an adjustment programme, build a structure from the other bank to bridge the remaining distance. In some years agriculture has to build longer spans than in others, for its bank is a shifting one. To build its part of the bridge agriculture must have that authority which I spoke of in 1929 to the agricultural economists as 'the moral, legal, and economic equivalent of what the corporate form of organization has given to industry . . . '.

With industry in the United States controlling prices and regulating production to sustain controlled prices, in most cases with the protection from foreign competition afforded by extremely high tariffs, either our agriculture must have corresponding power or we must bring about a situation in industry where production is sustained on a level of a more consistent abundance.

In asking what American industry's price policy should be we face a real dilemma. If industrial crises are to be permitted to recur, and are to be corrected by industrial prices falling as rapidly as farm prices fall during depressions, then other adjustments must be made too. Wages, freight rates, utility charges, interest payments, and

other fixed charges must all come down together in times of depression. If they do not, then many business concerns must go through the wringer of bankruptcy and reorganization before low prices can produce recovery.

As our society is now organized with corporate structures, labour unions, utility commissions, and government budgets and tax rates, I question whether we can count on such deflationary tactics to deal with depressions. Instead, most countries are now using the device of compensatory government spending to offset the declines in private spending and investment during depressions.

The recovery now just getting under way in the United States seems due in considerable part to the firm foundation government spending has placed under consumer purchasing power. Production has declined far faster than the stabilized consumption; the heavy industrial inventories of last year have been worked down in many lines; and more industrial production is now needed to balance current consumption. The further expansion in consumer income from the expanding relief programme in the months ahead will stimulate still more employment. To-day most countries seem to prefer to rely more on this new device of the temporarily unbalanced budget, and less on the device of falling prices and deflation, to check depressions.

There is thus serious question whether we could make industrial prices so flexible as themselves to *cure* the depressions. But there is another possibility. Perhaps if industrial prices were made more flexible over long periods that might help *prevent* depressions.

Some of us in the United States do know that the control of prices by corporations has helped to retard the distribution to consumers of the gains from increased productivity. As industrial output per worker rises, prices must fall and wages must rise, if consumers are to benefit. If corporations, through their control over prices, hold back too much of such gains for profits, buying power does not keep pace with consumption. It is clear that the 1929 depression was preceded by such maladjustments. Between 1923 and 1929 the income of farmers rose 4 per cent. Income paid out to workers and other employees increased 22 per cent. But income paid out as interest and dividend increased 50 per cent. If corporations had put more of the efficiency gains of the twenties into lower prices and higher wages, and less into rapidly rising profits, the stock price bubble would never have been blown so large, and the whole sorry economic sequence after 1929 might have been greatly different.

How industrial prices in the United States can be made flexible,

either for the long pull or the short one, and what means can be used to make them so, still remains to be worked out. The so-called Monopoly Investigation Committee is now studying this whole problem of corporate control and of corporate price and production policies. If that committee can work out practical recommendations which will help produce such industrial price, wage, and production policies as provide better industrial stability and fuller employment and production, farmers will have a vital interest in seeing that those recommendations are carried into effect.

In this connexion it is to be hoped that the principle of balanced abundance can be accepted by our industry as well as by our agriculture. In agriculture, with the Ever Normal Granary principle recognized in the 1938 Agricultural Adjustment Act, we are in position to make a steady advance towards working out that principle of balanced abundance which will prove in the long run to be best both for farmers and consumers. Can industry work out some form of Ever Normal Warehouse which will best sustain employment and which will result in a more continuous flow of industrial goods into consumers' hands, even though the prices of industrial goods fluctuate somewhat more widely than they have been doing in recent years?

An important determinant of how farmers in the United States will use their organization for the control of the supply of agricultural products is the nature of the foreign market which can be regained. I have in mind both the stability or instability of that market and the types of goods it will accept.

It is probable that in the future the types of goods which will move most in international trade are those which can be produced economically by large-scale methods. Of course, there will also be much movement of certain essential raw materials and of goods involving special skills. But, in agriculture especially, the goods which move internationally will tend to be those which are produced with the help of machinery used on an extensive scale.

I raise the question, therefore, as to whether the way of life on those farms which produce goods for countries overseas can be as happy on the average as the way of life on those farms which produce products for people at home. It is possible that under the ideal set-up farmers will somehow be protected from the socially undesirable effects of excessive commercialization of agriculture. Perhaps ways can be devised of accomplishing this purpose without impairing the technical efficiency of large-scale operations. In this, as in everything else, there is a happy medium, and in working towards this happy medium we must always keep in mind the history

of the immediate past. We want to engage in trade only to the extent that we can do so on the basis of a way of life fitting to the citizens of a wealthy and resourceful country.

In the United States we have very definitely before us the problem of maintaining a market for our export cotton while at the same time we enable our cotton farmers to live better than they have in the past. More international exchange of goods is probably the principal need of the cotton farmer of the United States. But the cotton farmer sees no virtue in putting 8 million bales of cotton on the world market year after year if that means he must accept an unprofitable price of 5 cents a pound for it. There is no gain to the cotton farmer, and none to the country either in the long run, in destroying the hills of the South by overploughing merely to supply the cotton exporters of the United States and the cotton importers of the rest of the world with 5-cent cotton.

We do propose in the United States to make our cotton production methods as efficient as possible. By producing on the richer lands which can be protected from erosion, by using the most approved varieties of cotton which we are rapidly discovering through an intensive research programme, and by reducing pest and other hazards, I believe we are going to be able to meet fair competition from any country in the world, provided we follow a sensible lending policy and provided our tariff policy with regard to the bulk of our imports is such as to enable foreigners to obtain the necessary dollar purchasing power to pay for our cotton surplus.

The statement which I have made with respect to cotton applies in principle to our other exportable agricultural products. We believe we can meet legitimate competition from the world in cotton, wheat, lard, tobacco, and many kinds of fruits. I believe that by following our Trade Agreements Programme we can build up a sound foreign market for a considerable volume of agricultural exports, and I think we can fill that market in competition with unsubsidized exports from other nations.

To me the most important thing about the type of middle path our country is trying to follow is its consistence with the greatest expansion of both agricultural and industrial production. If the other portions of our economy meet us in the spirit of balanced abundance, the domestic market will expand as a whole. Imports will be increased, and our foreign market thus will also be expanded. The two are interdependent. There is ample room for abundant and healthy activity in both domestic and foreign economic relations.

I should like to say just a word about the desirability of gradually

working out an International Ever Normal Granary, first with respect to wheat, and eventually, as we learn our lesson from wheat, with other raw materials. If each of the wheat-producing countries can set up wheat reserves in years of good weather and at the same time protect its farmers from price collapse in such years it should be possible to stabilize much more definitely year after year the share of each of the countries in the world wheat market. All the great raw materials which are affected by weather demand international consideration. The International Wheat Conference is a step in this direction. Some day it will really amount to something. But, first, certain key nations must exhibit a greater capacity to understand and work for stability on a world-wide scale.

In conclusion I wish to say that in my opinion the international idealism of the United States has not disappeared. Our Trade Agreements Programme is proof of that. We are genuinely interested in all moves which look in the direction of ameliorating world economic conditions, but we know that we cannot make any worth-while contribution unless we straighten out our own internal economy so that it will function more smoothly. We are exceedingly interested in working for world economic peace, provided we can do so in a practical manner. In connexion with the very sincere desire which so many Americans have to help in bringing about world peace and harmony, one must also take into account the tremendous fear which nearly all Americans have with regard to the hatreds and manœuvrings of 'balance of power' politics in Europe. Our people would like to help, but we do not know how to help safely. In the purely agricultural world it may be that we can help by understanding better the economics and sociology of both American agriculture and world agriculture. During the last twenty years, and especially during the last five years, we have been busy formulating in the United States the doctrines of agricultural statesmanship as they relate to the general welfare. We have been endeavouring to work out the principles of balance between agriculture, labour, and industry. We are now endeavouring to perfect the Ever Normal Granary, which will carry over crops from the years of good weather to the years of poor weather. We are endeavouring to relate our agriculture to the fact that the United States has become a creditor instead of a debtor nation. In our efforts we have improved our soil fertility and have increased the farmer's share of the national income, while at the same time the city people of the United States have been benefited. I hope that some of that which we have learned will be of benefit to agricultural statesmen in other

nations. I know that those of you who are in a position to come to Washington will find men in the Department of Agriculture eager to be of the utmost service to you. This applies not only to the economists but also to the scientists and the administrators of action programmes.

Nearly every nation in the world has been engaging in action programmes for agriculture during the past ten years. The international aspects of our own programmes in 1933 and 1934 called for a spirit of co-operation on the part of both exporting and importing countries, particularly those concerned with wheat and cotton, so that a fair sharing of world trade might be jointly and more sensibly determined. That co-operative basis has not as yet been fully developed. The domestic aspects of our agricultural action programmes called for a restoration of industrial activity and the development of non-agricultural occupations for our surplus labour when both urban and rural purchasing power were stimulated. Here too, for various reasons, the hoped-for progress has not yet fully materialized.

In the realities of 1938 we find numerous countries pursuing their programmes of price fixing and export subsidy with little regard to the fact that when carried to an extreme they are naturally self-defeating. Such programmes when carried out by a number of countries at the same time bring about an excessive increase in the supply of products on the international market and waste human effort which had best be devoted to producing something else.

Export subsidies are a type of economic warfare which, if used on a large scale and for a long time, eventually and almost inevitably harms the nation which uses the subsidy more than it harms any one else. Nevertheless, in certain emergencies, there may be exceptional and compelling circumstances justifying the use of export subsidies for limited and temporary purposes. It is such a situation that now confronts us in the case of wheat. In such a situation it is exceedingly desirable that our export efforts should work in the direction of eventual stability. In carrying out such a subsidy measure the United States, of course, must do everything it can in a co-operative spirit to synchronize its efforts along this line with those of the Canadian Government. We do not propose to use any type of subsidy which will result in extensive overploughing of our hill land or our poor land in order to send large quantities of our farm products abroad with nothing coming back in return. We must not ruin our soil for the sake of our exporters and our foreign customers, and we must not unduly encourage exports of those

products which our consumers can use in larger quantities at home; but neither must we lose our fair share in the world trade of cotton, wheat, hog products, and so on, by failure to take fully as aggressive actions as the other nations in the competitive export fields. We have powerful machinery for taking action along these lines, and we have supplies of certain farm products far beyond domestic needs. It would be a good thing indeed if the various agricultural ministries of the world could meet together to draw up a set of principles on which all nations could agree. I am convinced all nations could agree on the desirability of systems of agriculture which will maintain soil fertility and which will tend to give the farm section of the population a fair share of the national income. Perhaps there could be agreement on the desirability of giving to agriculture the moral, legal, and economic equivalent of what the corporate form of organization gives to industry while at the same time the family-sized farm is maintained. And perhaps there could even be progress in jointly and democratically determining the course of international trade in farm products as a contribution to economic stability and peace.

DISCUSSION

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One finds in the two main papers on 'International Trade in Relation to Agricultural Development' a rather dominant note. If I interpret the authors correctly, both feel that too much dependence may not be placed upon the likelihood of increased volume of foreign trade in agricultural products.

Professor Minderhoud concludes that 'the volume of international trade in the future will diminish rather than increase'. Secretary Wallace exhibits more faith in the possibilities of increased volume, but that faith is far from a conviction.

These conclusions prompt me to inquire briefly as to the reasons for the expectation of a continued low level of world commerce. Is it because the economic advantages attributed to foreign trade no longer obtain? Can it be that the premisses upon which the arguments of the economist are based are no longer valid? It is held in some quarters that technical progress is so widespread as to eliminate, or at least to reduce markedly, the comparative advantages once enjoyed by various nations in specific fields of production. I am of the opinion that the importance of the evidence is greatly exaggerated. To refute this argument one need only point out that

the bulk of world trade is still carried on between the most highly developed industrial countries. One need not labour the point before this group that numerous and extensive economic advantages are still to be had by a division of labour among nations.

The argument of the economist that less world trade and its stepfather—national self-sufficiency—will inevitably lead to lower standards of living falls upon a seemingly disinterested audience. These arguments do not impress. I have often observed that, as far as the United States is concerned, there is no subject upon which the economists are so thoroughly agreed as on the tariff, nor one upon which they exert so little influence. This brings me to one of the points which I wish to develop. It is that foreign trade has, in considerable measure, ceased to be an economic subject. Its controlling forces lie largely in other fields.

One of the speakers during the sessions on farm labour stated that the status of farm labourers in India was the result not of economic forces but of the caste system, religious beliefs, and established customs. In at least some countries one is faced with a similar situation with regard to international trade. Considerations of political expediency, the desire for a numerous agricultural population regardless of cost, and requirements for national defence, have largely removed international trade, for the present at least, from the subject-matter field of the economist.

In order to avoid the tempting pitfalls of generalization, may I illustrate by the use of specific examples? Take the question of political expediency. Until recently in the United States tariff rates were the offspring of political manoeuvring. The schedules were formulated by Congress. It became good politics for members to secure high duties on the products of the regions which they represented. One way of accomplishing this end was for a legislator to agree with his colleagues to support their requests for more protection in return for their support of his own demands for higher duties. This process reduced the tariff to a purely local issue, without regard to the effect of the sum of the increases upon the national economy. Its results were higher import duties. The point to be emphasized, however, is that, whatever might be the economic effects of the process, it was considered good political strategy by a majority of the Members of Congress to secure tariff favours for their constituencies.

In certain respects few nations have exhibited more zeal in this direction than has the United States. We are now in the process of granting independence to our largest dependency. Evidence is

not lacking in support of the belief that this action is being taken in order that we may penalize the imports from this dependency. One is reminded of the ancient but not honourable practice of inviting a guest to the feast in order that one might more conveniently administer poison.

I quite agree with Secretary Wallace that the present system of tariff-making by technicians removed from direct political pressure is a marked improvement in our own tariff-making machinery. In this respect the United States has returned international trade to the economic fold.

Another outstanding consideration which tends to remove international trade from the subject-matter field of economics is the belief manifested in many countries that a declining agriculture is the sign of a decaying nation; that agricultural numbers must be maintained at all costs.

At this Conference some speakers have pointed out that too many people on the land was not a good thing for agriculture. But the weight of opinion seems to be that governments must support their agriculture far beyond its economic importance to the nation. This support is generally such as to attract to the land more people than can be supported by the land at accepted standards of well-being.

Here again I must suppress the desire to generalize, by observing that in the United States we have too many people on the land. Agricultural prosperity would markedly increase if a smaller proportion of the population were engaged in agriculture. I am inclined to believe that the desire for a numerous agricultural population in most other countries is largely based upon other than economic considerations.

The most prevalent way, perhaps, of supporting larger numbers of people upon the land is that of maintaining domestic price-levels for agricultural products above world-levels. Such practices lay a deadly hand upon agricultural commerce between nations.

Another dominating force controlling international trade policies among nations at the present time has to do with considerations of national defence. Self-sufficiency in agricultural raw materials is a vital part of most defence programmes. Some people still remember those wheatless, meatless, fatless, sugarless days. Here cost is not the controlling factor. Economic logic is likely to receive a cold reception in a military atmosphere. The economist can only sit and wring his hands—or perhaps just sit. We all recognize, I am sure, that there can be no healthy growth of international trade under a threat of armed conflict among major powers. A feeling of national

security is a basic essential to the resumption of what may be considered as normal world-trade relations.

It is at this point that I make a reservation regarding the conclusion reached by Professor Minderhoud that in the future the volume of international trade will diminish. The accuracy of his prophecy seems to me to depend in large measure on developments in this field of national security. If major powers feel that they must always be prepared for war; if armed conflicts and the threat of war become chronic; then I must accept his conclusions. But if nations should find their military burdens too heavy and turn to other means of settling their differences, it is reasonable to expect a relaxation in trade barriers which belong essentially to self-sufficiency aspirations. Except under the stress of conflict or threatened conflict, I doubt if the people of most nations will be willing long to continue to pay two or three times world prices for the essentials of life, or to continue to accept more costly and less desirable substitutes.

Now may I turn to a more direct discussion of a portion of Secretary Wallace's paper? I am quite in agreement with him on many of his foreign trade views, and especially am I in agreement with him with regard to the importance of foreign trade to American agriculture.

I am one of those extremists who insist that no satisfactory solution of agriculture's economic woes in our country will be found unless it includes healthy foreign outlets for our agricultural staples. I do not say that the foreign market is the whole story, but I do insist that it is an essential part. I appreciate also that it may not be possible to effectuate that type of solution. If that be the case, we must be prepared to accept for an indefinite period the aches and pains, the stresses and strains, which are bound to accompany alternative solutions.

I find myself in disagreement with the Secretary on certain phases of the agricultural adjustment programme which I believe to be in direct conflict with policies designed to promote foreign trade. I confess to a bewilderment in his use of the term 'middle course', not only in this paper but upon previous occasions. To me the agricultural adjustment programmes, when considered with the reciprocal trade agreements from the standpoint of promoting international trade, represent not one but many courses—some of them running in opposite directions.

The complementary nature of the adjustment programmes and reciprocal trade agreements is illustrated in the Secretary's paper by a bridge. The Department of State through its reciprocal trade

agreements is projecting a span from one bank. The Agricultural Adjustment Administration is building a temporary structure from the other bank to join that built by the Department of State.

To continue the analogy: My analysis leads me to believe that some of the plans for the temporary structure were hastily drafted, and some of the material used badly adapted for the purpose, with the result that parts of the structure projected from the agricultural bank are falling into the water washing against the State Department's pier, in such quantities as to endanger the work on that portion of the bridge.

To be more specific, the phases of the agricultural adjustment programmes which I believe to be in conflict with sound foreign trade policies are:

First, there is the making of commodity loans which exceed world market prices. The raising of domestic prices above world-levels by means of loans on the commodities is an effective means of closing normal export channels to those commodities. Formerly, the domestic price of cotton—our greatest export crop—was held for a considerable period above the world price by loans considerably above world market values. The current wheat loans threaten to create a similar situation. One need not comment extensively upon the disastrous effects of these practices upon exports.

Secondly, there is the export-subsidizing and by-products diversion of commodities with surpluses induced largely by a high protective tariff. Here I refer to specialty crops with surpluses not caused by loss of world markets, because they never were dependent upon these markets, or due to the bounties of favourable weather conditions. Their surpluses are largely due to a high protective tariff which has kept domestic prices at such levels as to bring about a state of over-production which promises to become chronic. Yet the Government at the present time cares for the surpluses by contributing financially to their diversion into by-product channels and to the foreign market. Here obviously is a situation caused by legislative protection which has created its own excesses and which, in my estimation, is not remedied by additional governmental support.

The third and most disconcerting practice to which I refer is the export subsidy. The export subsidy violates the spirit if not the letter of sound international trade relations. It is contrary to what I have always considered to be the basic assumptions of our trade agreements. But more important still is the likelihood of the subsidies creating complications which will react unfavourably upon our programme for international trade development.

Secretary Wallace, in the proof copy of his paper, has well stated the case in these words: 'Export subsidies are a type of economic warfare which eventually almost inevitably harms the nation which uses the subsidy more than any one else.' In the final draft as read this morning the statement has a significant qualification: 'export subsidies are a type of economic warfare which, *if used on a large scale and for a long period*, eventually and almost inevitably harms the nation which uses the subsidy more than it harms any one else.'¹

One appreciates that the first statement was prepared before the recently announced policy of subsidizing the exports of wheat by the Government of the United States. One appreciates also that such a policy calls for some qualifications in a statement by a high official of the Government applying the subsidy. For my part I am inclined to accept the first statement at its full face value, for I believe that all export subsidies are contrary to sound international trade policies.

We have subsidized, on a rather large scale, the export of Pacific Coast wheat. We now propose to extend the practice to all wheat. May I express the apprehension that the export subsidy is a second mistake fathered by a first mistake—loans on wheat above its world market price? For me this proposal raises grave doubts. It may be defended, perhaps, on the grounds that all nations are playing the same game; that one must fight fire with fire. Yet the fact remains that we cannot indulge in subsidizing exports on any considerable scale and at the same time build a sound foundation for a more permanent foreign outlet for our staple agricultural products. May we not be sacrificing substantial future gains for lesser and more temporary advantages?

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Two years ago, at the Conference held at St. Andrews, one section of the programme was devoted to the consideration of 'Commercial Policy and the Outlook for International Trade in Agricultural Products'. The general title for to-day's programme, 'International Trade in Relation to Agricultural Development', is similar but not identical. It embodies a change more in wording than in substance; and I have been wondering whether the revision may not have been intended to suggest the desirability of breaking new ground rather than of seeking continuity of discussion from one conference to another. Those who attended the sessions at

¹ My italics.

St. Andrews, or who have had an opportunity to read the report of the proceedings, will recall that the discussion of 'Commercial Policy and the Outlook for International Trade in Agricultural Products' resolved itself for the greater part into a rather spirited consideration of the wheat problem. To-day, quite independently of any intent that there may have been on the part of the Programme Committee to indicate a preference for new channels of discussion, I intend to refrain from initiating a return to the subject of wheat, a subject which has run such a strange and perverse course since that evening in September—forty years ago next week—when Sir William Crookes delivered his memorable address in Bristol as President of the British Association. I propose merely to salute the wheat question and to pass by, yielding only to the impulse to quote this one sentence from the opening speech at the corresponding session of the St. Andrews conference: 'If two years from now the answer to the question is 60 cent wheat, then we woolly-headed planners will at least have the satisfaction of saying "I told you so".' The present quotation for the Chicago September future seems almost to have been made to order!

Running through the opening papers that have been presented by Mr. Secretary Wallace and Professor Minderhoud, there are two veins of common thought that keep constantly coming to the surface.

First, there is the insistence in both papers upon recognition of the fact that international trade rests upon the principle that, if nations are to sell, they must be prepared to buy. Professor Minderhoud, in referring to the types of trade agreements that are now so much in evidence, says: 'The negotiations about these agreements show the truth of the old adage that in order to be able to export one has to import as well.' It seems hardly conceivable that the world should have reached its present stage of commercial development without having acquired an ingrained grasp of that basic fact. But we cannot blink our eyes to the sober reality that the lesson has not been learned. In nine short words Secretary Wallace has stated the cold truth that has still to be faced: 'Every one wants to sell. None wants to buy.' How can one explain the power of resistance with which this attitude is held? Partly perhaps in this way. Prior to the great depression and particularly in the pre-War period the flow of international trade and of capital movements worked so smoothly along multilateral lines, made its adjustments of balances so unobtrusively in triangular and multi-angular ways, that the fundamentals of the system were hidden from the common

view. Under those conditions there was some excuse for failure to see and fully to understand that nations must buy in order to sell.

There is no such excuse for failure to-day. Recent years have stripped the mechanism of world commerce of its refinements and accessories. To quote from a recent study by the Royal Institute of International Affairs: 'The system of international investment lies shattered, and the idea of international lending is viewed with profound misgiving both in debtor and in creditor countries.' Gone also, without immediate prospect of return, are the gold standard and the monetary system that furnished the operating equipment, if not the basis, of exchange stability. Shorn of these vital complements, trade between many countries has been thrown back upon primitive methods, has been reduced to the simplest form. The fundamentals of commerce between countries have been laid bare and exposed for all to see. International trade no longer appears as an intricate, delicate, and mysterious mechanism, requiring an expert to explain what makes it go. The processes of bilateral bargaining and of bilateral balancing, as we now see them in action, should clear away—if anything can clear away—all doubt as to whether nations must buy in order to sell. Every clearing and payments agreement is nothing more or less than a two-sided admission that 'we can buy from you only if you will buy from us'. The formula admits of little variation. It may be stated in any one of half a dozen ways, but it is always reducible to words of one syllable that no one can mistake. Whether they are willing to recognize it or not, all countries have been compelled to accept to some extent this basis of doing business.

I am enough of an optimist, or of a fatalist, to believe that the very universality of this reversion to primitive methods of carrying on commerce is bound to serve a large purpose over and above its primary utility in rescuing international trade from a descent to even lower levels. Education of the most practical and vivid type—one might almost say of the roughest, hardest kind—must precede and underlie any durable reconstruction of world commerce. Speaking of the obstacles that confront the trade-restoring objectives of the Reciprocal Trade Agreements Programme, Secretary Wallace has said: 'Each nation wants to expand its exports and cut down its imports.' That attitude or aim, if not broken down, spells deadlock and stagnation in the field of international trade. If it is to be combated with success, it must be through demonstration of its futility. Could there be any more convincing form of demonstration than the world is now receiving in regard to the fact that buying and

selling must go hand in hand? How long must the demonstration be continued before that fact is fully digested? And, when it is fully digested, what will be the result? Shall we find that, broadly speaking, the desire to expand exports is stronger among nations than their desire to cut down imports? Or shall we be forced to the view that the desire to sell is weaker and less insistent than the urge to restrict imports? In the one event we may expect the restoration and renewed growth of trade; in the other, continued shrinkage.

These questions bring me to the second vein of common thought traversing the opening papers. Both papers, it seems to me, arrive not at the same spot but in the same neighbourhood as regards this problem of the future of international trade. Professor Minderhoud closes his paper with this sentence: 'The conclusion of my considerations cannot be other than that the volume of international trade in future will diminish rather than increase, especially in view of the many difficulties which in the whole present world are weighing upon agriculture.'

Perhaps I should be taking an undue liberty were I to assume that Secretary Wallace concurs in the view that international trade *as a whole* is likely to diminish rather than to increase, but, in explaining the close relationship between the commercial and the agricultural policies of the United States, he has clearly stated the outlook as regards that important element of world commerce represented by American farm exports. To quote from the text of his paper (proof copy): 'At the same time, recognizing that there is no likelihood of pushing these agreements far enough completely to restore the foreign market for the volume of farm products which we exported in the early years of this century or in the decade of the twenties, we have been developing forms of organization designed to bring about an adjustment between our exportable surpluses and the quantities which we can market abroad at a fair price.' And again: 'We do not turn our back upon the world any more than circumstances absolutely force us to. But we recognize the realities of the post-War situation and do not fool ourselves as to the volume or the nature of the foreign market which can be created for our products.'

No country accustomed to depend to any substantial extent upon the export of farm products can fly in the face of the facts that have led Professor Minderhoud to the conclusion he has stated, or that have led the United States to espouse a dual policy designed in part to rehabilitate its commerce in farm products and in part to adjust its agricultural economy to a smaller scale of production for export.

Yet it will be readily and sympathetically understood, I think, that *in certain countries* resignation to a lowered volume of farm exports and the definite acceptance of that view of the future as the basis of policy are bound to await inescapable evidence that there is no alternative. Some nations, indeed many nations, may consider that the evidence is already conclusive, but in this, as in other cases, the same evidence or the same set of facts can scarcely serve to carry equal conviction in all quarters. It is not that the 'certain countries' which I have in mind are closing their eyes to the realities, or that they are wilfully laggard in taking decisions that have elsewhere been accepted as inevitable. It is rather that they are realistic in the very highest degree, forced by their own circumstances to be doubly sure of their ground in shaping their policies for the future.

These 'certain countries'—they need not be enumerated—are countries that exhibit two characteristics. First, they are countries where production in the exporting industries, especially in field and animal husbandry, relies *mainly and not secondarily* upon export outlets. Their domestic markets for those industries are relatively small. For these countries retreat from export markets would be retreat from the major means of livelihood, not from the minor. It would entail drastic changes in internal economy, requiring a shift of productive forces that could hardly be considered as falling within the meaning of the term 'adjustment'.

Secondly, these countries are of the debtor class. To reduce their exports of agricultural products, unless they have other lines of export production to which they might turn in increased measure, would tend to weaken their capacity to pay. In describing American policy Secretary Wallace has referred briefly, but most appositely, to both the recent and the more remote history of international investment, to the altered financial status of the United States, and to the outlook for the resumption of international lending on a large scale—all in their bearing upon the development and financing of export trade. And in his entire paper there is, I think, no single sentence more illuminating than this: 'We are endeavouring to relate our agriculture to the fact that the United States has become a creditor instead of a debtor nation.' That sentence alone carries a wealth of significance with respect to the readiness or the reluctance of different nations to concede either the need or the wisdom of moving to bring their export production within smaller compass.

Given a group of nations with this combination of circumstances—the debtor position coupled with the extreme degree of dependence upon exports—we should be more than obtuse if we did not

expect to find in this group the hard core of resistance to policies of export trade retrenchment. It has been customary in recent years to speak of the 'hard core of unemployment' in the United Kingdom, using that term in reference to unemployment of the kind that seems beyond the reach of any real remedy except that of time. In a somewhat similar sense a hard core may be said to exist in the field of international trade; and it is to be found in those countries where, if the shrinkage of export markets finally forces the adoption of policies to curtail agricultural production, it will not be possible to say 'we are relating our agriculture to our status as a creditor country'. The group of debtor countries, that contribute a large portion of the total world export of agricultural products and that owe a very considerable share of the world's total long-time loans, will have to look long and hard at the problem of how to frame policies of restricting production that can be reconciled with or related to their position as debtor countries.

What will they do about it, or what can they do? I have so little faith in economic prophecy that I confine myself merely to suggesting some of the courses that these countries may take—not that they will take. They may, first, correct their own shortcomings in regard to full recognition of the fact that in order to sell nations must buy. They may do that without stultifying themselves as claimants for recognition of their debtor circumstances. As regards adjustments of their production to accord with narrowed export outlets, they may continue to hold back from the adoption of permanent and general policies, relying upon short-time policies to deal with the specific sectors of international trade that threaten to get out of hand. Further, they may subject their existing commercial policies to the closest re-examination to satisfy themselves that the direction of their international purchasing, as distinct from its volume, is contributing in the maximum degree to the purpose of restoring the export markets for their respective products.

Meantime these countries, caught in the vice of debtor obligations and of lowered exports, will grasp at every straw of hope that export trade is not doomed to diminish. And they may find it in unexpected quarters. May I quote, by way of illustration, a paragraph or two from a speech delivered in March of this year by His Excellency Felice Guarneri, Italian Minister of Foreign Trade, in the Italian House of Deputies:

'Self-sufficiency, in so far as it aims at utilizing to the utmost the resources of the soil and subsoil and those of technical knowledge, developing the activities of the Empire in accordance with national needs,

does not imply a closed economy cut off from the currents of international life. On the contrary, it allows the development of an ample system of trade relations with all countries willing on a basis of reciprocity to accept our products in exchange for theirs. The utilization of national and imperial resources may in time lead to deep-seated changes in the qualitative consistency of our international trade, as has indeed happened in the case of all growing countries, but as some activities in both directions are curtailed or cease they are replaced by others arising from new needs which inevitably make themselves felt in the case of a prolific people with a rising standard of living.

'The total volume of trade under a system of self-sufficiency, as under any other system, is destined to expand rather than to shrink. But the expansion must be in both directions, for it is impossible for a country to continue to buy unless it sells, or to continue to buy more than the conditions in which it is placed enable it to pay.'

Having confessed the weakness of my trust in economic prophecy, I do not in this case regard the element of prophecy as more than an expression of faith. Nevertheless, it is to some extent heartening to find, joined hand in hand with the advocacy of self-sufficiency, a measure of confidence that the total volume of trade is destined to expand rather than to shrink.

G. MACKENROTH, *Institut für Weltwirtschaft, Kiel, Germany.*

Owing to the short time at my disposal, I will speak only on one important point of the subject which has formed the criterion for an appraisal of the present and future situation in all previous discussion—the influence of state agrarian policy on the international exchange of agricultural products. In this connexion I will present some facts which may perhaps be surprising to some of you. I draw in this respect on hitherto unpublished data which have been collected at the Institut für Weltwirtschaft at Kiel and which will soon be published by one of my collaborators, Dr. Schiller. I would not like to neglect the opportunity to present these data, at least in some of their results, to so great a number of eminent colleagues, and I hope to receive perhaps criticism and new ideas.

At the institute we have attempted to study in considerable detail the influence of the agrarian policy of the various countries on international trade. We chose thirty-two countries representing about 80–90 per cent. of the world trade in agricultural products, omitting the industrial raw materials of agricultural origin which have partly been dealt with in excellent monographs by others. Our studies, therefore, only apply to commodities of human nourishment. We studied how, in the case of these products, production, consumption,

and foreign trade are directly or indirectly influenced by state measures. Neglecting tariff duties as a method of state control and taking account only of direct measures of influencing the market, such as price control, control of production, regulation of consumption, export subsidies, quantitative control of imports and exports, and similar measures, we arrived at the result that over 55 per cent. of world trade in agricultural products is directly or indirectly affected by state measures of control or guidance.

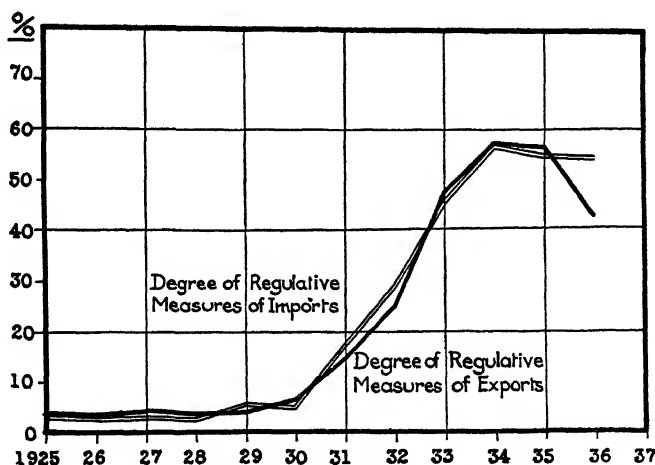


FIG. 1. The Degree of Influence of Regulatory Measures in World Trade in Agricultural Products, 1925-36.

For the real expert on the subject this figure is perhaps not at all surprising. But it shows to what extent to-day the practice of *laissez-faire* is forced into the defensive in our field, even in foreign trade which—in contrast to domestic economy—is still accounted the domain of *laissez-faire*.

I would like now to draw your attention to some facts which may throw some light on the subject with which we are concerned here. For this purpose I would ask you, for a moment, to devote your attention to the graphs which I have prepared. I have prepared them to save the recital of statistics.

The development of 'the degree of influence of regulative measures', as I call it, i.e. the proportion of products directly or indirectly under state control in the total imports and exports of all agricultural commodities, is shown in Fig. 1. The double line shows the degree of influence of regulative measures of imports, the solid line that of exports.

First of all, the surprising thing is the complete conformance of the degrees of influence of regulative measures in imports and exports. What it means is that in equal measure as the great importing countries have exerted state influence on price and volume of their foreign trade by means of import restrictions, fixing of prices, &c., the exporting countries have exercised state influence on their export commodities through export subsidies, fixing of prices and quotas, &c. However, from the standpoint of world economy, regulative measures applied to the international exchange of commodities by exporting countries are aimed in the opposite direction from those of importing countries. In general the measures of exporting countries are for promoting or maintaining exports, whereas in general the regulations of importing countries are to protect their own producers by restricting imports. On this assumption, though it is somewhat crude, the conclusion would be that these measures roughly balance each other as to quantity and value of the commodities affected.

Secondly, the time factor also runs completely parallel. It is not the case, as presumably might be expected, that the importing countries led the way in state control; rather, the influence of state control increased in imports and exports concurrently from the year 1930 onwards, i.e. shortly after the commencement of the depression, and reached its first culminating point in both about the year 1934-5 with 55 per cent. I would like to set these facts in contrast with the popular conceptions, unhappily also shared by some professional economists, that the much-criticized self-sufficiency tendencies and so-called nationalistic economic doctrines of only a few countries were, by means of direct or indirect state control or planned guidance of foreign trade, the cause of the disturbance of the finely woven network of free international exchange.

Thirdly, we were not content with these findings and went a step further in our analysis. We divided the thirty-two countries into groups, whereby all countries with about the same agrarian-economic situation formed one group. We thus formed the following seven groups:

1. *The European deficiency countries*: Great Britain, Germany, France, Italy, Czechoslovakia, Belgium, Luxembourg.

2. *The old European processing countries*, i.e. those countries with a production of live-stock commodities, which already had a well-developed agricultural processing industry before the War and which sold the products to the European deficiency countries: Denmark, Netherlands, Sweden, Switzerland, Ireland.

3. *The new European processing countries*, to-day the strongest competitors of the old countries: Lithuania, Latvia, Esthonia, Finland, Norway.

4. *The European arable zone*: Poland, Yugoslavia, Rumania, Bulgaria, Hungary.

5. *The European border zone*, comprising countries which are not clearly drawn into this world-wide circle of zones around the European industrial centre: Portugal, Spain, Greece, Turkey.

6. *The overseas export-expanding countries*, which are competitors of the European exporting countries both in products of arable farming and of live-stock husbandry, and which are becoming increasingly prominent, thanks to favourable natural conditions of production: Australia, New Zealand, Canada, South Africa, Argentina.

7. *The overseas export-contracting countries*. To this group belong above all the United States, but also Japan. The United States is the old supplying country of the European industrial centres, but owing to the development of domestic industrial population and consumption it is increasingly falling out of international trade in food commodities.

We find that the country-groups show very characteristic differences in their degree of influence of regulative measures. Take Fig. 2 and look first at the left-hand graph. To-day the highest degree of influence of regulation is found in the old European processing countries. The European deficiency countries take only second place. The degree of influence is below average in the new European agricultural processing countries. But up to 1931 it was highest in these very countries.

As to exports—right-hand graph in Fig. 2—the old agricultural processing countries again have the highest degree of influence of regulation. The European arable countries have second place. Only the overseas export-expanding countries are below the world average. If we omit the overseas export-expanding countries with their relatively low degree of regulative influence, we find that at least in Europe the export commodities are subject to greater regulative control than imports. The degree of regulative influence of the European exporting countries lies throughout between 80 and 90 per cent.

This grouping of countries shows once again that things are not so simple as the popular conception assumes. Direct and indirect state measures of guidance go beyond merely protectionist policies on the part of the old European deficiency countries. It is particularly noticeable, for instance, that measures are equally pronounced

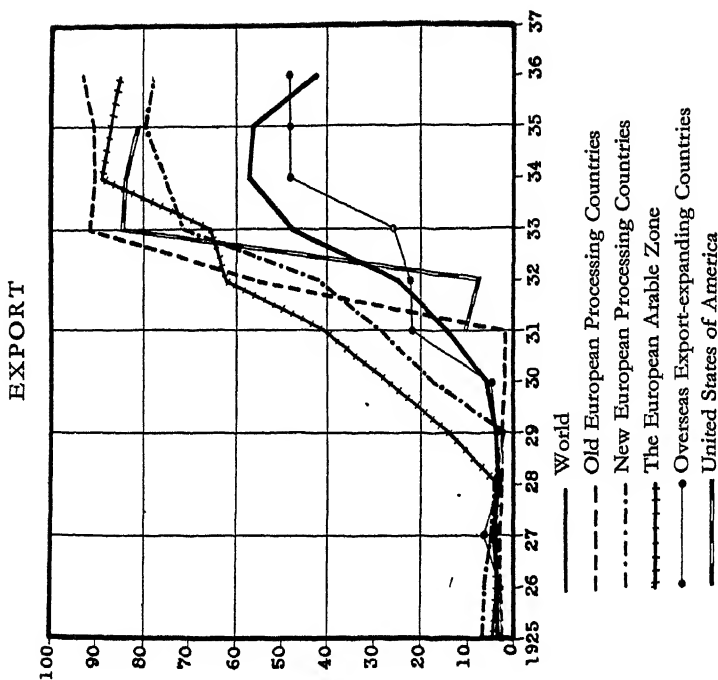
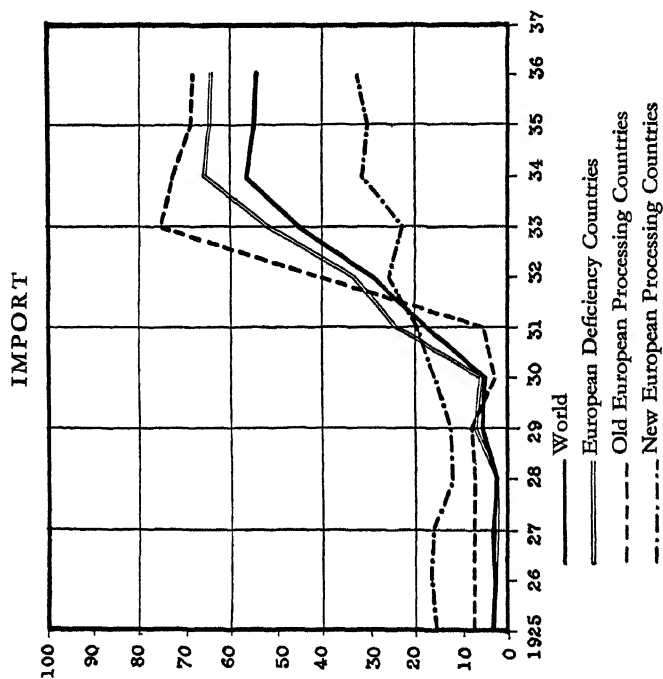


FIG. 2. Degree of Influence of Regulative Measures in World Trade in Agricultural Products by Groups of Countries, 1925-36 (per cent. of gold dollar value).

in old and new agricultural processing countries. Taking both imports and exports, the degree of regulative control is highest by far in the old European agricultural processing countries, i.e. they have the highest development of direct or indirect state control in their foreign trade in agricultural commodities. Among these countries are Holland, Denmark, and Switzerland; they are countries with the strongest tradition of economic liberalism in the whole world, and one cannot accuse them of over-great self-sufficiency tendencies or war-like ambitions.

Lastly, although we to-day believe that we have passed the first minimum point of world economic relations, the regulative tendencies do not show a diminishing tendency in any of the countries in question. On the contrary, the figures for the year 1937, of which we have not yet ascertained all and which I have therefore not inserted in the graphs, show that in a great many cases there is once again, after a short decline, a new rise in regulative tendencies.

Time does not allow me to draw all the deductions that might perhaps be deduced, but I will try to formulate at least a few theses which I may perhaps somewhat overstate in order to provoke your criticism:

1. The development from free international exchange of goods to forms of direct or indirect state control is world-wide for agricultural products and cannot be reversed. It is connected with the increasing integration of politics and economy taking place in all countries of the world whether it is desired or not. This integration of politics and economy is, in its turn, an expression of the fact that men are no longer willing to accept economic crises as tribulations of fate but wish to utilize all measures of state or common organization to prevent depressions.

2. *Per se*, the question of controlled or free international exchange of goods is completely irrelevant for volume and direction of exchange. It cannot be claimed that a controlled national economy must necessarily have a lower international exchange. More important are the distinctions between good and bad guidance, in external economy equally as in domestic economy. As a matter of fact we have at present inefficient control of domestic economy just as of external economy in many cases. The problems of political and social type that are involved are as yet too new. Neither men nor state apparatus are readjusted, and friction is caused in inter-state economic relations.

3. In the long run we may rest assured that, if there is no short-circuit in the form of war conflict, men will gradually learn. A

well-ordered domestic economy will always be a better partner in international trade relations than a national economy which has not yet put its own house in order. Nobody can shake my conviction that, if we order our national economies well and rationally—always on the assumption of a clear political atmosphere—the need for international exchange will be greater and not less. The mercantilist ‘fear of goods’, mentioned by Secretary Wallace, the desire always to sell and never to buy, is not only a mercantilist attitude towards economy; it is a bit of capitalism which still acts in us all, however fervently we may otherwise abjure *laissez-faire*. But I believe beyond all doubt that the contrary, the ‘hunger for goods’, the desire to supply oneself and one’s country as lavishly as possible with the goods of the world, is the natural attitude towards economic matters. It must again become manifest in a true socialistically ordered national economy. By means of a rationally ordered economy we shall perhaps arrive at a rationally ordered international exchange of goods, taking account of the interests of all concerned.

For the immediate present our problem is to put an end to classifying all direct and indirect state measures in domestic and external economy as exceptions from the rule. The facts prove that to-day state guidance has almost become the rule, not only in a few countries which are always said to show a special inclination to state control, but all over the world. Let us also put an end to always accounting them only as hindrances on the passive side of inter-state trade. The way to a revival of international trade, if it is ever to be achieved, is only through an ordered national economy.

Every attempt to revive inter-state economic relations must take account of the existing domestic ordering tendencies and must utilize them. They cannot be neglected. It is useless merely to yearn for the old conditions in which they had not found means to assert themselves. Once men have learnt that something can be achieved through state regulative control, they do not forget it. There is no way back; we must go through. The sooner we have ordered national economies, the sooner we may hope to arrive at least at a bearable form of inter-state trade, in which fundamentally all countries are equally interested. This appears to me to be the only realistic attitude to the problems of international trade in agricultural products.

OTTO PFLEIDERER, *Reichs-Kredit-Gesellschaft, Berlin, Germany.*

Mr. Wallace has explained to us very clearly the two principles which at the present time govern the foreign and the domestic

agricultural policy of the United States. Externally it is sought to increase international trade by means of systematic lowering of the tariffs on industrial goods. The aim of these tariff decreases, provided for in the trade agreements with other countries, is to give American agriculture a broader outlet to the world market. Internally the volume of agricultural production is being regulated to conform to the demand which may be expected at a price-level which provides a reasonable profit to the farmer.

These two fundamental principles of American trade and agricultural policy, which supplement each other very rationally, are certainly advantageous also to the European trade partners of the United States. The European countries have a vital trade interest in an increase in the purchasing power of American farmers. The basis of normal trade between the United States and Europe is undoubtedly that American agricultural products be exchanged for European industrial products.

In spite of the policy of attempting to produce all essential goods itself, Germany too, as recent developments have clearly shown, will continue to have a constant need for imports of agricultural products, necessitated by its economic structure. The United States can find a ready and lasting market for certain surplus products in satisfying this need, especially for cotton, fruits, and fodder crops. On the other hand there is hardly another market so well suited to the type of export products in which Germany excels, namely, industrial quality goods, as the United States with its high standard of living and its large population. It would thus appear that these two countries must be predestined for a highly developed trade with each other.

Why, in spite of these entirely favourable structural conditions, has trade between the United States and Germany, which was once so well developed, diminished so catastrophically in recent years? There are three important reasons for this development:

1. The boycott against German products promoted by certain circles in the United States.
2. The apparent incompatibility of the fundamental principles governing trade policy in the two countries (most-favoured-nation principle on the one hand and 'bilateralism' on the other).
3. The relatively excessive German price-level, which is due chiefly to the fact that Germany failed to follow the example of other countries in depreciating the currency.

The boycott need not be discussed here. If the other restricting factors were removed, its effectiveness would be very limited, since

the practical interests of both parties would strongly tend towards an increase in trade.

As for the two trade-policy principles, the most-favoured-nation clause and 'bilateralism', for the United States the problem is one of principle, whereas for Germany it is a much more vital one. Germany developed the practice of foreign exchange rationing on the basis of bilateralism not from an abstract principle but from practical necessity, and cannot give up this practice now without completely upsetting the basis of Germany's position in world trade. On the other hand the United States would be quite able to enter into an agreement in this case also, just as it did in the case of Canada in spite of the Empire preferences. Holland, a country which structurally, in its relation to Germany, is in a position very similar to that of the United States, has recognized the advantages of an intensive exchange of goods with Germany. The United States is harming itself by shutting Germany off from its markets, since even to-day Germany is one of the largest importers of some of the most important surplus products of American agriculture.

As to Germany's excessive price-level, it is generally agreed that this is a situation which cannot continue indefinitely, and that, in the short or long run, balanced international price relations must be restored. I cannot discuss here the enormous difficulties, both in principle and in practice, which the restoration of a sound international monetary system would involve. It is sufficient to mention that such an international monetary system cannot function satisfactorily unless currency reserves are distributed more evenly than at present. The United States holds a key position in this respect also. It is absurd to have the inflow of short-term credits and the repayment of long-term credits to the United States leading to continued accumulation of gold in that country, when it is at a loss to know what to do with its excess gold reserves. We may say on the world gold problem to-day the same as Mr. Wallace and Mr. Ashby said on the international debt problem in 1929: its solution cannot be indefinitely postponed; the longer it is put off, the greater the difficulties which will pile up for the final solution.

Practically speaking, a balanced distribution of currency reserves can in the long run be achieved only if the United States, over a period of years, consciously pays for additional imports of goods with gold and/or extends long-term credits to relatively undeveloped countries, credits to be granted by actual transfer of gold. A resumption of lending to European countries, as Mr. Wallace has rightly said, is out of the question in the present situation. As long

as a satisfactory basis for a workable international currency system does not exist, each country must meet its particular currency and balance of payments position by whatever method it thinks most appropriate. Germany, in view of the structural weakness of its balance of payments position, should not be blamed for employing the method of foreign exchange control with all its consequences; all the less as this structural weakness was due to an excessive accumulation of political debts for which the creditor countries are primarily responsible.

These are relatively long-term considerations. At present the short-run problem is more acute. All efforts of American economic policy to bring about a more intensive international trade would be made ineffective by a repetition of economic recession in the United States. American agriculture would not be least affected by a continued worsening of economic conditions in America, since there would be danger of a lowered demand for American agricultural products both in the countries trading with the United States and among the domestic industrial population. This would result in a fresh break-down of the price fabric in the international basic materials markets, and internally it would destroy the basis for a planned co-ordination between the supply of, and the demand for, agricultural products.

The success of the programme which has been undertaken to reduce unemployment by public works is consequently a vital question for American agriculture and for world trade as a whole. It should be considered, too, if in the long run the most important condition for renewed private investment activity might not even be to permit increased immigration. The cessation of the American population increase is certainly one of the most important reasons for the hopeless over-expansion of American producer-goods industries, under which American economic life is still suffering. At any rate the present experiences seem to show that, without the stimulus of increasing population, full employment under the prevailing economic system can be achieved only through strong political and financial strain. The responsibility for the degree of employment has been turned over to the governments in almost all countries, and the enormous increase in government debt and in tax burdens is the price which must be paid for this development.

A. W. ASHBY, *University College of Wales, Aberystwyth, Wales.*

There are one or two points on which I should like to offer comments on Mr. Wallace's paper. In the first instance there is an aspect

of international capital and trade relationships which has not been touched by Mr. Secretary Wallace or by any of the other speakers. The international systems of finance and production behind international trade during the last fifteen years or so have been much more subject to movement of capital between nations, which has no relationship to the trade, than ever before in the world's history. Mr. Wallace said that America suffered in the post-War period from not having an aristocracy—or at least a group of people—with broad conceptions of relationships between states, political and humanitarian as well as of a trading and economic character. I think the truth is a little different: that both the United States and Europe suffered in the post-War period because America had a group of financiers who were in some part ignorant, entirely unmoral, and for a large part operating in a sphere in which they had no guiding principles either political, moral, or sometimes economic. But we have to realize that there are many occasions of shifting capital having no relationship at all to real international trading, which are still continuing.

It is just as well, perhaps, that an agricultural economist should try to list some of these occasions and bring them to the notice of agricultural economists. There is temporary shifting of capital for what is called safety of capital; i.e. shifting from one country to another according to the political, or the expected economic, circumstances of one country or another. Then there are also very important shifts of capital for the purpose of exercising political influence, for assisting governments who are doing things approved by the financiers or for discouraging governments who are doing things which excite the disapproval of the financiers. In the cases of Great Britain and France, not to mention any other country, very considerable shifts of capital have been made in order to assist on occasions in attempts to upset governments. There are also occasions of international movements of capital for the purpose of breaking markets to the advantage of the financial group which is making the shift. Sometimes the aim is to rig a general investment market; sometimes it is to break the market for one commodity and the investment market associated with that commodity. Also on occasions there are very large transfers of capital from one country to another according to either temporary or permanent shifts in the domicile of certain very rich families and groups. The first three forms of these shifts, the shifts for expected safety, for exercising political influence, and for rigging markets, do play very important parts in international transfers of

capital and consequently influence international transfers of actual goods.

If we turn to international trade in the forms in which we usually think about it, it seems still necessary to repeat that nearly all real international loans are made in goods and nearly all international payments have to be made in goods. We might add services to goods, but they are rendered more by the lending than by the borrowing countries. Nearly all real loans have to be serviced in goods.

Proceeding from this basis, I think it is very necessary that somebody should say that there is room for a considerable development in international production and exchange for the further improvement of the standard of living of the peoples engaged in the process. It is necessary to say that, I think, because there are two sets of ideas to the contrary. There are people who are saying that distribution of production internationally on the basis of comparative cost is no longer necessary because of the slowing up of the increase in world population. They say that the nineteenth-century process of distributing international production and trade on the basis of comparative cost was only necessary because of the very rapid increase in population during that period. It seems to me rather that the contrary is true; that a combination of technical progress, the discovery of new areas for the use of new implements and machines, and the discovery of new raw materials, made possible, in part, the increase in population. It also made possible the very rapid rise in the standard of life of the peoples of Europe and North America and some other countries.

There are also people who say that the recent very rapid technical progress, with the great potentialities of technical progress at the present moment, make quite unnecessary any distribution of production on an international basis. Nobody could look at the condition of the population of Europe, at the condition of the population of a large part of the United States of America or Canada, and still say that it is not necessary for the industrial commercial world to use every means which it has in distribution of production and technical progress combined, in order to raise still further the supply of goods and services which the poorer part of our population needs to bring them up to what they, and I hope we, would regard in the second quarter of the twentieth century as a satisfactory standard of living.

Following that statement we should all the time bear in mind that any process of foreign lending that has a real basis in goods is a postponement of consumption on the part of the lender in order that

both the lender and the borrower may in the future have a greater supply of goods and services than either of them would have got if the loan had not been made. That is the basis of exchange which benefits both parties. There are still opportunities for lending and development of production on that basis, and the world still needs them.

But there is the corollary. If it is true that the loan accelerates and assists production both for the lender and for the borrower, it follows that in the long run both the countries concerned have to make the political, the social, as well as the economic arrangements, which will enable them to distribute and to consume the wealth, the increase in wealth, which is a result of the process. If the United States of America, let us say, is going to make loans on that basis, it can only get effective repayment in the future if it is providing either for vast increases in leisure or for vast increases in consumption or for some increases in both. That seems to be the crux on which hangs both the full development of internal national production and the redevelopment of international trade with the full application of the technical powers of production. I am not at all sure that that crux is not much more important than what is being described as the fear and uncertainty of military attack of one nation on another nation. But whether that is so or not, I am perfectly certain that the determination to protect the industrial capitalist system as it has existed is linked up in some degree with this desire to anticipate war in some cases and to avoid it in other cases, or that it is mixed up with a general political and semi-military insecurity, especially in the Europe of the present day. I do not know at the moment how we can meet the situation which is confronting us, either in respect of making further progress in the distribution of wealth, in securing consumption, or in setting the whole productive machine at work again, or how entirely we can get away from the political insecurity. But I do not believe we can do it on the basis of fighting for international trade with subsidies or anything of that kind.

I am inclined to agree with our German friend who said that a regulated home production was consistent with a development of international trade on the basis of regulation. Even there, however, one has to recognize that in both home planning and international planning there is not quite the same degree of security for those people who have to stake their fortunes on the plan as there was in the old days of what we called free trade. Political changes in 'plans' or programmes may be more abrupt, even more 'catastrophic', than the changes brought about by market forces. There is considerable

danger in political change in trends, not only as regards home production but also as regards the distribution of production on an international basis. But I think, in spite of that risk, we have to go forward, at least as far as Great Britain is concerned, towards more regulation and, I hope, in the long run towards direct national participation in import trade and possibly in both import and export trade. So far as one can see at the moment that foundation will give us the greatest possibilities of a development of international trade which I myself regard as essential to the welfare of the population of the industrial commercial world.

J. F. DUNCAN, *International Federation of Landworkers, Scotland.*

I was trying to avoid the President's eye after Professor Ashby spoke, because he has gone over most of the points and put very largely the point of view I was going to put before you, and he can do it so very much better than I can. But since I have been called upon, there are one or two comments I should like to make on the papers we have had this morning. Professor Minderhoud's paper seemed to me to be excellent, a model paper for presenting the economic issues involved in international trade. I am quite sure that every one here must be in a depressed mood as a result of reading it, because of the inescapable conclusions that he has put to us.

When Mr. Secretary Wallace presented his view I could not help feeling that Henry Wallace had developed as a politician in the last eight years. I am not so sure he has developed as an economist quite as well. I sympathize with him and with every politician. I think we ought all to sympathize with the politicians because those of us who are dealing with matters on a much narrower scale and those fortunate economists who are simply telling the world how far it will go wrong if it does certain things have a much easier job than the politicians have. A politician has to take account not merely of events and feelings in his own country but of the possibilities of what can be done with other countries.

I feel inclined to take some of the positions that Mr. Wallace is putting before us and push them back from the international field into the home field. Take that very simple statement that everybody wants to sell and nobody wants to buy. Is not that the basis of the whole of our profit-making system of industry? Of course, the manufacturer knows that he must buy raw material, but he wants to buy it as cheaply as he can; he wants, as we used to put it in Great Britain, to buy cheap and sell dear. But when you transfer

'buy cheap and sell dear' into the international field, we all see the danger of it; we can all see the disasters. What we forget is that the same mentality and the same outlook are operating throughout industry, and that all the stresses and strains that may be set up in the international field result from the strains which we have set up within the state, and that the whole matter has to be dealt with within the state as well as in the international field.

So far as international trade is concerned, I am not so much worried about the methods that may be adopted. I could not help underlining some of the adjectives in Mr. Wallace's paper. 'Fair competition', 'legitimate competition', 'unsubsidized exports', and so on—'we are exceedingly interested in working for world economic peace provided we can do so in a practical manner'. Whenever was the competition fair? How can it be legitimate? It may be legitimate granted certain premises, but it is all a question of what the premises are. There is no fair competition between an employer, with a large body of capital behind him, and a bunch of working men who have got to get a job if they are to have a meal next day. The settling of wages under 'fair competition' of that kind may be quite 'legitimate', but it is an act of war. So also in the international field you may say we want 'legitimate competition'; but whenever international trade is based on economic nationalism, then all questions of fair competition, of what is legitimate, whether you should subsidize or in any way help your own particular trade, go by the board, and each nation must consider what method best suits its interests under these 'war' circumstances.

What is wrong is not the particular plans. We had a certain amount of security that trade could promote good relations between nations when it was conducted more on a free-trade basis. We had a certain amount of security, but only a certain amount. It was quite as possible under the free-trade system for the stronger nation to exploit the weaker, and for the stronger groups within the nation to exploit the weaker groups. It is just as possible to have good relations between the nations with a system of trade which is regulated, which is not left to a free enterprise and to the search for profits, but these relations are liable to be upset by the people who are in control of capital.

What is important, and here we get outside the field of the economist, is the spirit in which trade is being conducted. I cannot help feeling despondent when I read in an American paper and I hear Mr. Secretary Wallace say that the people in the U.S.A. do not want to get mixed up in the 'isms', in our war situation in Europe,

in balance of power politics, and so on. Apart from the question of war altogether, the power politics of Europe at the present time are a development of the economic nationalisms of the nineteen-twenties, and America has been just as fully implicated in the growth of economic nationalisms as any other country in the world, quite as responsible for the economic nationalisms as any other country in the world. Even if we could by some magic wand wave away the whole of the fear of war, but left economic nationalisms, we should all still be building up defensive economic measures in the same way as we talk about building up defensive armaments. Nobody, you will notice, is ever building up aggressive economic nationalisms, just as no nation ever builds up aggressive armaments. We are all defending, just as we are all wanting to sell and not to buy. It is the same spirit underlying the whole thing. From the point of view of the economics of the country and the relation of agriculture to international trade it is a matter of importance, but not of the greatest importance, whether we are regulating industry or working under a system of free industry.

What are of importance are the ends that we are trying to secure. Then the question to which the economist can hope to give an answer becomes: Given our ends and given the circumstances, what are the best means for achieving these ends? Unfortunately in the meantime we are all at sixes and sevens as to the ends. Each of us is working to the end that our own nation builds up its economic defences. As long as we are working along these lines I agree with Mr. Ashby when he says we are going to find it very difficult to raise the standard of living in any country, or throughout the world generally. The most important thing, whether or not you like 'isms' and whether or not you like the war situation, is that we get away from this attitude of regarding nations as separate enclaves within which we try to build up economic systems, expecting each to be able to go its own way. We have got to get away from that spirit before we can get any discussions as to economic methods. Everything is in the melting-pot, and none of us can keep out of it. America cannot keep out of it any more than those of us who may be sitting near the powder magazine of Europe.

The whole situation is dependent upon that spirit of nationalism. That attitude of looking inimicably over the wall at our neighbours instead of trying to get down the barriers and enter into a freer method of exchange which would give us the opportunity of developing our resources, with the realization that prosperity is dependent upon our united efforts under the modern world circumstances,

is the root of our troubles. It is absolutely impossible for any one country to shut itself off either militarily, economically, culturally, or in any other way. We have got to take the 'isms' into account and contribute our share to providing the better 'isms' for the conduct of the world as a whole.

ANDREW STEWART, *University of Alberta, Edmonton, Canada.*

It is with some hesitation that I take part in this discussion, but there is one general point, arising principally out of Mr. Secretary Wallace's paper, to which I should like to refer.

It is important in referring to international investment that we should distinguish, as Professor Ashby has done, between different kinds of transfers of capital. In passing, and in connexion with Professor Ashby's remarks, I might point out that while I am unable personally to judge of the morality of other people it does seem obvious that, if the financial interests have the power which Professor Ashby imputes to them, they frequently act in an extremely stupid fashion.

We are probably all in agreement that transfers of capital form an essential part of the process of division of labour and specialization of function which has in the past contributed so greatly to the promotion of the general welfare. I am not so sure that equally universal assent would be given to the principles of lending which Secretary Wallace has suggested may dominate the policy of his country in the future, namely, of lending to undeveloped areas which produce only non-competitive products. But the kind of capital movements which we must deplore are those of an erratic, spasmodic, unpredictable, and irrational type. These are unfortunate for two reasons. First, because when they occur they do not give sufficient time for orderly processes of adjustment to take place, and consequently cause confusion, upheaval, and loss. In the second place, where conditions are such that large movements of this kind can occur, there is unavoidable uncertainty.

It was, I think, one of the virtues of the older order of things that there was a certain measure of regularity in the occurrence of events, and developments could be deduced with some degree of assurance from objective factors. Since the War, with the development of control and the investing of power in individuals at the centre, there has been a tendency—a cumulative tendency—to get away from this regularity and predictability. To-day, when we speak of countries, we generally speak of individuals. We do this because we know that certain individuals may, by a stroke of the pen, invert

the whole proceedings. We know that developments do not occur regularly in response to objective factors but that these developments are conceived within the minds of individuals.

Now, the reaction to this condition may not be a rational one, although I am inclined to think that on the basis of experience there are reasonable grounds for apprehension. In any event it is undoubtedly true that this condition does contribute to general uncertainty. Moreover, unfortunately, protestations of good intentions are not enough to allay these fears; again experience suggests that there is much truth in the old adage to the effect that these comprise the material which paves the road to hell.

The point is that, in pursuing the objective of internal security, we have not, as Mr. Duncan has contended, eliminated competition. We have simply shifted the location of competition to the national boundaries and have thrown into the field of competition the whole weight of the support of the community. Balance of power politics within countries has led to unbalanced power economics between countries.

It may be, as has been suggested in Mr. Secretary Wallace's paper, that the solution lies in the direction of the development of international control of international transactions. But in that event we are again simply shifting the location of competition and massing the forces of exporting countries against those of importing countries. What proportions international trade may assume when that is achieved is difficult to predict.

If international co-operation is to be the way out, then it seems to me that no individual country will be able to partake of the advantages of international co-operation when it sees advantage to itself, without at the same time assuming all of the responsibilities—some of these perhaps unattractive—which that form of collectivism implies. I am not sure that we are yet at the point where we are willing to accept these responsibilities.

S. SCHMIDT, *University of Cracow, Poland.*

I am glad Secretary Wallace is with us to-day so that I can in his presence frankly repeat a point regarding international trade which I have been insisting on since the Conference I attended at Cornell in 1930 and which I was always expressing to my teacher, the late Dr. Warren.

In studying international trade and its disturbances we should always take heed, much more than we usually do, of the position of the weakest seller and of the weakest buyer. The trade in a

commodity is not solely a question of volume, as many people seem to think. It is a question of the volume combined with the purchasing power.

You will notice that whenever Britain is prosperous—I am not a Britisher, and you need not be afraid that I am speaking for Britain—prices of foods and of other agricultural products are pushed up from the demand side. We notice the effect very well in our country. On the other hand, whenever Britain is in the midst of depression, prices drop because the British consumer is willing to take the same volume of goods only at a lower price. Prices in world trade depend, in fact, to a great extent upon the purchasing power of the British consumer, since from the point of view of international trade in food products Britain is one of the greatest consumers and can dominate the prices of food from the demand side.

On the other side the supply of goods has to be taken into account, and I venture to express the opinion that in this respect North America thinks too much of herself. It is not her supply that primarily influences prices. Prices depend upon the weakest sellers, and these particularly are the countries of South America and eastern Europe.

At the Conference in 1930 I gave some figures showing that prices of grain in east Europe are subject to much greater changes than those in North America. For the last few years, for instance, our grain prices in east Europe have been higher than in this country. During the last few weeks, however, prices of Polish grain have dropped by about 50 per cent. The reason is simply that our harvests in recent years up to this year have been comparatively short. This year the harvest in east Europe is much better. Prices have dropped for this reason and not because of the big volume that is being produced in North America.

It is necessary to pay attention to the weakest seller and the weakest buyer and to the purchasing power which influences the demand side and the supply side. Although I do not, of course, like to appear to be giving advice, I should think that if Americans would start industry in eastern Europe—not competing but complementary industry—much more would be done for stabilizing the prices of the food products which America has to export than can be accomplished by the different methods used at present.

I tried to show at St. Andrews that the volume of products which east Europe sells abroad is not the result of a high production but of the very low standard of living of our rural population. As an

example I quote our bacon industry. We started the bacon industry in Poland after the War. Because of our own low consumption we could easily by now have been in the first place as a bacon-exporting country, and Denmark as well as Holland would have found it hard to compete with us. If we have not done so, it is only because we began to control our bacon industry ourselves by putting those premiums on grain export for which we are so much blamed by Mr. Duncan. Six months ago export premiums on grain were cancelled, but now, if our Government does not reintroduce the export premiums on grain, the bacon industry will expand again, and farmers in America will have reason to complain about canned Polish ham coming to this country to compete with Iowa ham, as they already do.

If you are unconvinced as to how important the low standard of living may be for the international supply of agricultural products, the next Conference to be held in Hungary will provide an appropriate place for demonstrating and explaining the point to you in the life of the surrounding countries.

G. MINDERHOUD.

I have been exceedingly interested in the discussion on these papers by Secretary Wallace and myself. There is nothing, however, to which I feel that it is necessary for me to reply, and I prefer to hear what Secretary Wallace has to say in answer to the points raised on the policy of the United States. The only thing I wish to say is to thank the members of the Conference most sincerely for the interest they have taken in my paper.

SECRETARY H. A. WALLACE (*in reply*).

I am very much tempted to follow the procedure which Professor Minderhoud has followed, but, since so many comments have been made on the policy of the United States, I am perhaps, as Professor Minderhoud has suggested, under an obligation to reply. What we are all interested in—those of us who are not in economics for the mere pleasure of intellectual exercise—is to bring about day by day, week by week, and year by year, those necessary adjustments which enable us to get along in this world, state by state, country by country. We are all sincerely desirous of bringing that to pass. In theory I have agreed with practically everything that has been said here in these exceptionally fine discussions this afternoon. It has been a thoughtful discussion—a discussion of an unusually high quality. I accept most willingly Mr. Ashby's amendment to my

characterization of the international financiers. I agree most heartily with him that loans must eventually be paid in goods, although it seems to me he forgot for a moment the services and invisible items which economists usually include as a correction. Those members here who have come from the various countries of Europe to Canada have diverted from Europe to this side of the Atlantic foreign exchange which otherwise would have been enough to buy several thousand bushels of wheat for Europe.

It has been suggested that Professor Minderhoud and I were very pessimistic about the future of international trade. I would not undertake to speak for him, but I am quite willing to grant that the time may come five or ten years from now, I do not know when or how, when international trade might again expand extraordinarily and might conceivably expand faster than it has ever expanded before. I see no indication of that at the present time either from the facts or from the psychology of the situation. But changes come with exceeding speed in this field just as they come with exceeding speed in the field of the business cycle. This month we are in a depression, the next month the wind has changed its direction, and we suddenly are started on our way again. There are, however, certain necessary stabilities and assurances which are not present just now.

With regard to Mr. Hobson's criticism of the United States agricultural policy—first, with respect to our loans being too high, secondly, with respect to our use of surplus commodities (money to divert products to foreign use or to relief use), thirdly, with respect to subsidy—I would like to make the observation that perhaps I have done much more suffering on behalf of Mr. Hobson's point of view than he has done himself in each of those respective fields. And as a result of that suffering (I think we can learn from suffering) I have developed, as Mr. Duncan would say, as a politician and not as an economist.

Now let me suggest how economics sometimes works in the field of practical affairs. We are faced day by day with the inevitable psychologies of people who have inadequate education and are faced with definite emergencies. With regard to our commodity loans, the only loan that I can think of at the moment that has kept our products off the foreign market in any substantial quantity was the 12-cent cotton loan of 1935. It happened at that time (and I myself was against a loan as high as 12 cents) that many of us had not discovered the techniques of sufficiently resisting certain types of pressure. I think, however, that perhaps this administration has been

as successful in resisting pressures of that type as most administrations. The 12-cent cotton loan kept cotton in the United States above the world price from about March or late February 1935 until September 1935. With regard to the other loans, you cannot find any clear-cut evidence that they held the American price above the world price unless you go into the more abstruse types of statistical analysis. At any rate American cotton was being sold at the world price steadily and was not being held off the market particularly. The argument might be urged that the United States does not produce the same share of world cotton consumption as was the case five years ago or ten years ago. However, for fifty years the United States has steadily lost in her share of world cotton consumption, and projecting the trends throughout the period you can say that in 1937, on the same basis of trend, we should have had 37 per cent. of the world cotton consumption; actually we had 32 per cent.

Perhaps the loan policy was responsible for the difference. We do know this, however, that great increases in cotton production have taken place outside the United States—in Russia, for example. No matter what the price was in our country, Russia would have expanded to just the same extent. Our price policy had nothing to do with Russian expansion. I suspect the British would have strongly encouraged cotton expansion in Uganda, no matter what our price policy. In China, I suspect the combination of the Chinese and Japanese situation would have resulted in the same degree of expansion in China, no matter what our price policy. The fourth and last country in which there was great expansion was Brazil. Brazil's expansion was encouraged in very large measure by that country's unusual currency devaluation. Thus exceedingly low prices for cotton in terms of dollars or in terms of gold were attractive to Brazilians in terms of milreis. Also the alternative crop in San Paolo, coffee, has lost greatly in attractiveness by comparison with cotton. I am not saying that our price policy here did not have something to do with cotton expansion in Brazil, though I may say the Brazilian ambassador assured me most solemnly that he was convinced that it had no effect whatever and that they were determined to bring about cotton expansion for certain reasons.

In the case of wheat we now have a loan which, at the time we made it, was substantially at the going price at that time. For certain reasons which I will not go into now I do not think the wheat loan, in spite of the fact that it is above the current market, is going to hold any substantial quantity of wheat off the market regardless

of what is done on this matter of the so-called subsidy or new wheat policy. The wheat loan is 52 per cent. of parity. In other words, with the wheat loan as it is, wheat at that price would buy 52 per cent. of the things the farmers customarily buy as wheat would have bought in the years before the War. I do not think it could be called an extraordinarily high loan. The cotton loan is about 55 per cent. of parity prices, and the new cotton loan will only be 52 per cent. of parity. We have the option in the 1938 Agricultural Act of making the loan anywhere between 52 and 75 per cent. With wheat I think we demonstrated the strength of our ability to withstand pressure, and we held it to the 52 per cent. In the case of cotton I am hoping that we will be similarly successful.

When prices get down to distressed levels of 52 per cent. of parity I am not worrying about holding the product off the world market. At that point I am willing to take the criticism and to come back and criticize. It may be suggested that the parity-price standard, in view of improvement in farm technologies, gives the wrong answer; that the combine has come in the case of wheat and improved varieties, &c. That may be true to some extent, although I do not think it changes the result by more than ten points. But if it does change the result by more than that, I want to suggest that what it gets around to is: What are you going to do with the farm people if prices go very low? Suppose the long-time price of wheat will bring balance so far as all forces are concerned at 50 cents a bushel, or say 52 per cent. of parity. In that case there is a tremendous problem of population adjustment; not many growers can survive on 50-cent wheat. I think that is one thing we have to keep in mind in all of this discussion. How can you, with the least wear and tear and everything considered, bring about the necessary adjustments in order to maintain a living economic and social organism? All things are not decided in the purely economic field. There is a point beyond which specific segments of the population simply will not stand for low prices and incomes. When that point is reached it is necessary to take action of some kind, and the question is: What kind of action will bring about the fewest unfavourable repercussions in the long run?

I have told our farmers a good many times that they should not look on the loans as price-fixing in nature, except at the very bottom. They should look on the loans as a device enabling them to hold their surpluses till by their own efforts in co-operation with the Government they have brought about a better supply and demand situation. I think that is the proper way to look at it. So I suspect

in the main, while we may measure the economic forces somewhat differently, Mr. Hobson and I are not so very far out of line in our size-up of the situation.

With regard to our use of the powers of the Surplus Commodity Corporation, first let me say for the benefit of those who are not familiar with our Surplus Commodity Corporation that it is a corporation which has a close relationship to the Department of Agriculture. It has money which comes from section 32 of the 1935 amendments to the Agricultural Adjustment Act. This money is 30 per cent. of the customs receipts; in this particular year about \$145,000,000 is available for the use of this Corporation. The money can be used to buy up farm products which are unusually cheap and to distribute them through the state relief agencies to the people on relief, or to sell them where they can be sold. We have used the powers of the Corporation only to a small extent for purposes of selling products in Europe. We have sold some walnuts in Europe, certain other types of nuts, I think perhaps some prunes, but in the main the powers have been used to sell vegetables, fruits, dairy products, or to give fruits, vegetables, and dairy products through the state relief agencies to the people on relief. I think this has been good for the people on relief and for the farmer. Mr. Waugh of the Bureau of Agricultural Economics in Washington has made rather a careful study, the results of which are presented in the May 1938 issue of the *Farm Economics Journal*, which indicates that there can be a greater total income for agriculture in the case of products of the nature of dairy products, fruits, and vegetables, if a part of such products is channelled off at one level of prices for the benefit of those people who have low incomes, while the rest moves at a higher level of price to the people who have higher incomes. The total income to the farmers can be greater, and undoubtedly the total of human satisfaction can be greater, by following such a policy. I believe there are economists who dispute Mr. Waugh's discussion. I believe that, with the bargaining powers that exist in the modern economy, Mr. Waugh is right, whatever the supply and demand curves may show.

In the use of the powers of the Surplus Commodity Corporation we have not usually stepped in to buy until the product has gone down to less than 60 per cent. of parity. Dairy products have occasionally been an exception, but most products have gone down to less than 60 per cent. of parity before we began to buy. I have insisted on no buying under the surplus removal programme until the price is at a level where, as a result of observing the action of

big purchasers, we knew that unfair bargaining practices were being used. It is so easy to criticize procedure of this sort on theoretical grounds, and I agree with the theoretical grounds up to a certain point, but when certain limits are passed I move the theoretical grounds out of the way. I do not minimize in any way the usefulness of economists, and I hope that they do not become infected with my point of view, because if they did they might lose their usefulness to me, and I appreciate their usefulness to me. I want them to be able to look at these economic forces in a cold-blooded way and give me the results of their analysis without fear or trembling.

With regard to subsidies, I am not sure that this group is familiar with the statement issued to the Press on Thursday in connexion with a meeting at Ottawa between certain representatives of the Canadian Government and M. L. Wilson and Leslie Wheeler of the U.S. Department of Agriculture. This is the statement of policy which was given to the Press at that time.

'Mr. Wilson outlined the crop situation in the United States and market prospects having regard to the world wheat situation. In reply to his inquiry the Canadian officials outlined conditions in the Canadian wheat areas and explained in detail the working of the Canadian marketing system, involving guaranteed minimum prices and an export policy based on normal merchandising of wheat at competitive prices through the regular trade channels. The United States programme which is now being formulated contemplates, it was pointed out, a similar policy with respect to the sale of wheat through the regular channels at competitive prices in response to the demands of the market.'

The policy that is being followed is marketing the wheat through regular channels at competitive prices in response to the demands of the market. Both the Canadians and the United States are using this policy.

The United States used a policy of this sort in 1934-5 with the north-west wheat—Mr. Hobson has criticized the use of the policy at that time. It happened that we had a large crop in the north-west of soft white wheat, more than we could use, and we moved it out under exactly the policy mentioned here. We did not move it out in a manner which was destructive to world prices. We watched that point with very great care, and I think we did a skilful job. I think we were warranted in doing the job as we did do it. Following that a great deal of pressure was put on us by the north-western wheat-growers in subsequent years to adopt a similar policy, but we refused to do so. But now this year the situation has greatly changed

in the United States. For four years, 1933-6 inclusive, the average wheat crop of the United States was 582 million bushels as compared with ordinary consumption for all purposes in the United States of 650 million bushels. If we had had average yields per acre on the planted acreage and average winter-killing on the planted acreage during that four-year period, we should have had an average crop of 845 million bushels instead of 582 million bushels. In other words, during that period we should have had at least 170 million bushels of wheat to put on the world market with our plantings as they were. Finally last year, 1937, we harvested a crop of around 850 million bushels; this year we have a crop of 956 million bushels, and if we had no exports we should have a carry-over next July 1 of over 400 million bushels, which would be the greatest on record.

At this stage it seems to me there comes into our thinking the principle of gradualism. You cannot make changes in this human world in too jerky a fashion, not in a democracy at least, and I am not sure that in the long run you can get away with it under any system. The wheat people in the United States have been planting wheat steadily on a basis which, with normal weather, would produce over 800 million bushels. In view of the fact that we are a creditor nation, we do feel it essential, now that weather has come back to a more nearly normal state, to get our acreage down. We are going to endeavour to do so to the fullest extent which the psychology of our people will support, and I feel that that is a contribution to the world wheat situation. But I feel that it will be impossible for us to get our acreage down and hold it to a point where it represents a production with ordinary weather of less than 750 million bushels. You may find out later that I am wrong in that estimate, but that is roughly what it looks like now. We are faced with a very definite situation, a very huge wheat supply. We do have to do something about it. If we consider alternatives, for example the cost of storing wheat year after year in the United States in quantities far beyond the necessities of our Ever Normal Granary, it seems to me you cannot find a policy that is as constructive as the policy we are now following. If any one can suggest another alternative, I should like to have it.

It seems to me that, while the United States was open to very serious criticism during the decade of the twenties both with regard to her tariff policy and her international loaning policy, we have not been subject to quite such serious criticism since 1933. I think our reciprocal trade agreements which have brought the tariffs on industrial imports down by 10 or 15 per cent. have been something

of a contribution to the world economic situation. I think the adjustment we have made in the acreage of our crops has been to some extent a contribution to a solution of the world agricultural situation. I think perhaps we have worked steadily in the United States in the last four years, at least as steadily as any other nation, towards the solution of the world agricultural situation, and we are exceedingly eager to work with other nations towards a fundamental solution of the world agricultural situation. But we do have to take in to account the psychology of our own people. We cannot carry the load by ourselves.

We may be able to hold wheat acreage down to a certain point, but we cannot expect our farmers to go completely off the international market; it just cannot be done. So it is also with cotton. It seems to me wise for the various agricultural ministries to compare notes in terms of the national psychologies as to what their respective peoples will stand for and what they will not stand for, and then see how the various policies add up in terms of meeting the prospective demand for agricultural products.

With regard to the comments of our Scots friend as to American responsibility for world trouble, I would like to say that there were certain gentlemen who sat around the table at Versailles in 1919 who had some responsibility. One of those gentlemen came from England, if my memory serves me right, and somehow I have a recollection of the way England behaved herself in 1931 with respect both to tariffs and the devaluation of gold. I do not know of anything to be gained by recriminations. I am quite willing to beat my breast and cry *mea culpa*, if my Scots friend will do likewise. But I do not know what profit there is in looking towards the past. What we are really interested in is stability and security in the future.

I was very much interested in listening to our German friends. The earphones did not work perfectly at all times, but I thought the interpreter did a marvellous job. The Germans were excellent in their presentation of their point of view, and I think it was a splendid thing to give enunciation to what I believe to be a fact—that with regard to certain matters the world is not turning back. The old days are dead and gone. It will be a new *laissez-faire* if we come to *laissez-faire*; it will be a new liberalism if we come to liberalism. And it is quite conceivable that we will learn a lot from these various experiments which have to do with more or less direct governmental controls in the field of loans, production policies, and exchange controls. Sooner or later various efforts along this line

will have to be integrated to produce a greater amount of world prosperity than is the case now. I think I will close on this note, with the suggestion of Mr. Ashby's that it is going to be necessary for the people of the United States, since the United States is a creditor nation, to learn to enjoy leisure and be willing to accept the goods that would administer to that leisure. We need to have perhaps a more precise calculus of the human desires of the future. We must not be afraid to look on recreation as having its economic aspect. But if we fail in this, I suppose sooner or later the United States will manage to escape from her creditor position in order that she may again cherish the puritanic discipline with which she is so much at home and have to work hard in order to pay some foreign country interest on her debts.

SEIGNIORIAL TENURE IN CANADA

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THE system of land tenure which to this day has always promoted the clearing, improving, and cultivating of the Canadian soil is that of private ownership. But it must be remembered that the appropriation of the soil by settlers has not always been practised in the same manner. During the period between the years 1626 and 1763 nearly all the lands given over to the Canadian farmers were taken from seigniorial estates. That is, they were distributed to the settlers by the seigneurs. After 1760, following the arrival of the English-speaking settlers, the system of free tenure was introduced in our country, and until 1854, in the territory which to-day forms the province of Quebec, there were both seigniorial tenure and free tenure. Since 1854 free tenure is the only system which has remained in force in the whole province of Quebec.

The year 1626 is important in the history of the system of ownership in this country, because in that year the granting of the oldest Canadian seignioriy was confirmed by the representative of the King of France, the Duke of Ventadour. In the title-deed confirming Louis Hébert as Seigneur, the King of France recalls his merits and services as an immigrant and as a settler and gives authority to him and also to his heirs to 'fully and peacefully dispose' of his estate as he will see fit.

Under the French régime about 220 seigniories were granted. Some of them covered less than one square mile, and some more than a hundred square miles. At the end of the French régime certain families and certain religious orders held several seigniories.

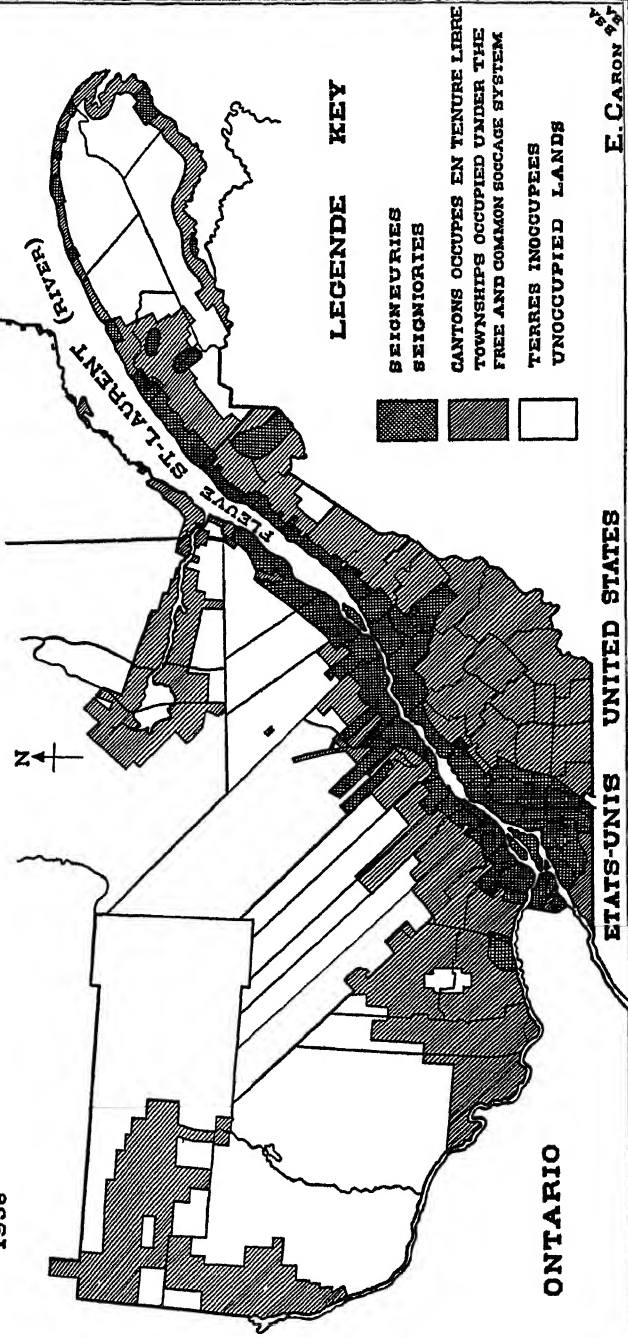
After the signing of the Treaty of Paris in 1763 instructions concerning the system of granting lands were given by London to Governor Murray apparently with a view to putting an end to the system of seigniorial tenure. However, in 1774 London thought it wise to authorize again the granting of seigniories. Under the English régime eight seigniories were granted.

If one compares to-day the total area of our old seigniories with the area of all lands occupied for agricultural purposes, it is found that the former represents hardly one quarter of the land owned to-day by farmers (see map). The seigniories were all

SECTION DE L'ECONOMIE RURALE
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PROVINCE DE QUEBEC LES SYSTEMES DE TENURE DU SOL SYSTEMS OF LAND TENURE



E. CARON
 1947

situated along the river St. Lawrence or its tributaries, or on the Gaspé Coast.

The Canadian seigniorial system imposed certain obligations both upon the seigneurs and upon the settlers. The principal obligations of the seigneurs to the king, derived from the system of seigniorial tenure itself, were the following:

1. Declaration of fealty and homage.
2. Payment of the 'Quint'.
3. The reservation for the benefit of the crown of certain natural resources.
4. Military service.
5. Preparation of the *aveux et dénombrements*.
6. Granting of lots to settlers.
7. Organization of their seigniories to the advantage of the inhabitants.

The declaration of fealty and homage was required of every seigneur who became the owner of a seignior by grant, inheritance, or purchase, and had to be received after a change of king. It was a solemn recognition of the royal authority accompanied by the taking of the oath of allegiance.

The payment of the 'Quint' was obligatory every time there was a change of seigneur on the estate otherwise than by direct succession. The 'Quint' represented, in theory, one-fifth of the sale value of the seignior and had to be paid to the first seigneur or to the crown. This source of revenue was never very important for the king.

In the title-deeds of seigniorial grants the king always reserved the right to use the lands necessary for the building of military fortifications, and also the wood for his navy, the mines, and the beaches. Every seigneur was honour bound to respect these reservations conscientiously.

Military service was one of the primary obligations of the seigneurs especially in a country like ours, always at war with Indians or with the New-England colonies. It followed naturally from the declaration of fealty and homage. The duties of military service often caused the absence of the seigneurs from their mansions for years at a time, and the clearing of the land was neglected. As a general rule the seigneurs earnestly fulfilled their military duties.

The *aveux et dénombrements* were a sort of topographical description and a census demanded of every seigneur within forty days after his coming into possession of his estate, whether by grant or otherwise, and repeated every twenty years. In these documents the seigneur

had to indicate the cultivated areas in his seignior, the number of his colonists, the list of their cattle, &c.

In the minds of those who established the seigniorial system in this country the granting of lots and the clearing up of the land constituted the chief aims of the system. The kings of France looked upon their seigneurs as their first land settlement agents. In 1711, following reports made by his intendants on the slowness of certain seigneurs in colonizing the country, the king stated his ideas very plainly on the duties of the seigneurs to grant lands to settlers. In the first Marly decree it is in fact written that every seigneur who had not promoted the colonization of his estate would lose his titles at the end of the year. In that same decree of 1711 the king gives to every prospective settler to whom a seigneur refused a lot the right to appeal to the government or to the intendant. These authorities had then the right to grant the lot refused by the seigneur and to deprive the latter of the rents paid by the settler.

On his estate the seigneur not only had to grant land to settlers, but he had to give them certain services: for example, he had to build a mill for the grinding of their grain, to furnish pasture for their cattle, to administer justice, to see to the building and maintenance of the roads, the bridges, and the church, &c. Within the limits of the estate the seigneur acted as a local governor.

After 1763, following the introduction of English laws and several English customs, the responsibilities of the seigneurs towards the settlers were gradually restricted or abolished, which naturally lowered the prestige of the seigneurs and paved the way for the complete abolition of the system of seigniorial tenure.

As occupiers of farm lands granted to them by the seigneur the Canadian settlers had the following duties to perform:

1. Payment of the *cens et rentes*.
2. *Lods et ventes*.
3. The use of the seigneur's grist mill.
4. The *corvée*.

The payment of the rents had to be made every year, usually on the first days of November. The *cens* was a recognition of the authority of the seigneur and represented a very small sum. The *rentes*, the rates of which varied in each seignior according to the contracts passed when granting the lots, were paid sometimes with money, sometimes in kind, and sometimes part with money and part in kind. They were considered as a partial payment of the expenses incurred by the seigneur in the colonization of the estate.

The *lods et ventes* due was paid to the seigneurs every time a lot

of land changed hands otherwise than by direct inheritance. This fine represented one-twelfth of the sale value of the property. Of the *lods et ventes*, Munro says :

‘In the earlier period of the French régime the seigniorial profits accruing from the payment of the *lods et ventes* were not large, for lands *en censive* changed hands, except by inheritance in direct succession, very infrequently; but in the later years of French dominion the increase of colonial population made transfers of land, especially in the vicinity of the settlements, much more frequent, and the seigniorial profits became in consequence very considerable. Still, the payment does not seem seriously to have hampered the normal course of land transfers until after the conquest, when it became one of the generally accepted evil incidents of the seigniorial system, by operating, especially in the case of valuable lands, as an unwholesome check on the free alienation of real property.’

In order to escape the payment of too high a fine to the seigneurs some *censitaires*, smarter than the others, sometimes declared a fictitious sale price below the real price. To protect himself the seigneur had then the right to buy the property himself at the price declared. It was the *droit de retrait* (right to retract).

La banalité du moulin obliged every settler to have his grain ground in his seigneur’s mill. This obligation was the counterpart of the one which imposed upon the seigneur the building of a grist mill for his settlers. During the whole French period of seigniorial tenure, the seigniories being very sparsely populated, such an obligation seemed to be an advantage to the settlers rather than to the seigneurs. Later, especially in thickly populated seigniories, the *banalité du moulin* was finally considered as very disadvantageous to the settlers and very profitable to the seigneurs.

The *corvée* could be demanded by the seigneurs from their *censitaires* for the clearing of new land, for the building or repairing of the bridges, the roads, the manor, the church, the military fortifications, &c. Under the French régime the average number of days of forced labour *corvée* demanded each year of each settler seldom exceeded six. After 1763, however, the number of days of forced labour increased considerably in several seigniories.

Besides those four major obligations which have just been mentioned, several others of secondary importance were imposed upon the colonists: declaration of fealty and homage to their seigneur, reservation of a certain quantity of wood and stones, fishing privileges, &c.

Briefly summed up, such were the conditions under which the seigniorial system in Canada evolved. It must be stated that the obligations imposed by the Crown were not always very well fulfilled

by the seigneurs or by the settlers. The former too often neglected their role of colonizers, and the latter showed too much inclination towards the fur business and the life of *coureurs des bois*.

It may be stated that, while the power of the seigneurs was great under the kings of France, after 1760, under the English sovereignty, things changed greatly. Many seigneurs sold their estates to merchants or to English officials, and the result was that the inhabitants were placed under new masters for whom they had very little sympathy. As Munro states very truly:

'In a word, the colony lost many of its natural leaders. On the other hand, English settlers flocked into the country in considerable numbers, and bought the seigniories of those who wished to leave. Many of these English settlers were wise enough to see that the purchase of seigniories at sacrifice prices was an excellent investment; for most of the estates included extensive tracts of ungranted lands, which, with the increase of the colony in population, would gradually rise in value. They saw, too, that with the settlement of the seigniories the dues payable by the habitants would be a source of considerable profit; and, finally, to many of the new arrivals the position and the title of seigneur seem to have appealed strongly. To the habitants this change was far from acceptable. They had no native respect for the new English seigneurs, who were to them the representatives of an alien race and a heretical creed, and who were, besides, prone to insist rigidly upon the letter of their rights, and were too often, it would appear, somewhat overbearing in their attitude toward their dependants.'

Moreover, the settlers from the British Isles or from New England would not accept the system of seigniorial tenure. They energetically pressed for free tenure or the application of the principle of 'free and common soccage'. In order to satisfy them London had to order the subdivision of the lands to be settled into townships and their sale outright by the Crown to the settlers for nominal sums.

The system of free tenure introduced into the new districts could not fail to attract the attention of the settlers established on the old seigniories and make them feel that their obligations towards their seigneurs were very burdensome.

And so, as the population of the old seigniories increased and with the development of the system of representative government, there appeared a growing disfavour on the part of the *habitants* towards the ancient seigniorial system. In 1854 the parliament of United Canada, in agreement with the conclusions of an inquiry conducted over a period of years by the foremost jurists of the time, passed a law abolishing definitely the system of seigniorial tenure. Compensation was given to the seigneurs for the loss of their

privileges, but the obligation on the part of the *habitants* of the seigniories to pay their *cens et rentes* was maintained. The legislature, however, allowed the *censitaires* to free themselves from their *rentes* all at once by the payment of a certain sum.

Many different opinions have been expressed on the seigniorial system introduced into Canada. Some have praised the system loudly, while others have criticized it, which goes to prove that it had its advantages and its shortcomings. As early as 1820 Mr. Andrew Stuart, president of a legislative committee chosen to inquire into the administration of public lands, declared:

‘The seigniorial system tends to bring about and has in fact brought about an equal division of the lands, which is conducive to the happiness of men, to good morale, to habits of thrift, to the stability of government legislation, and to the military strength of the country.’

Sir H. L. Lafontaine, one of the most competent and best informed of Canadian statesmen, declared:

‘The feudal institution introduced into Canada by the kings of France, altered as it was later by special legislation in order to better adapt it to the colonization of the newly-conquered country, a country covered with gigantic forests, with a very severe climate inhabited solely by bands of Indians, has been regarded by impartial men, as eminently adapted, in the beginning, to assure the success of that colonization.’

The same man added:

‘Although I am one of those who are unbiased in this appreciation of the history of the colonization of this country, and who believe that the seigniorial tenure, up to a comparatively recent date, has had the success which was expected of it, and which should be expected of it, I am also among those who judging coolly the changes which have occurred since in the condition, the needs, and the ideas of Canadian society are convinced that the legislation which presided over that tenure and the relations which it established between the seigneurs and the *censitaires* has ceased to be a part of the customs of this society. Now a law which does not adapt itself to the customs of a people, cannot long remain under our form of government, especially when that law, be it ever so just in principle, is later considered by the same people even wrongly, as being not a legitimate debt, but a tax, to which, as he is easily persuaded, he has not freely given his consent.

‘We must applaud the passing of the Seigniorial Act of 1854 from a still higher standpoint. It is a complete revolution of our institutions, and this revolution which, in other countries, could not have been brought about without bloodshed, and without destroying the foundations of society, there is every indication that in Canada, and it is to the honour of the population, it will be accomplished peacefully without trouble or commotion.’

As it is over eighty years since the abolition of seigniorial tenure in this country, it becomes rather difficult to measure its influence on our present agricultural conditions. There is, however, one well-known fact. Our farms situated on the old seigniories are, as a rule, much longer and narrower than those in the townships. On the Island of Orleans and on the Beaupré coast, there are farms which are more than two miles long and less than 300 feet wide. At Sainte Anne de la Pocatière the farm lots of the old seigniorie are $1\frac{1}{2}$ miles long and 384 feet wide. In the townships conditions in this regard, while not excellent, are better. There the lots are, as a rule, twice as wide as those of the seigniories and are seldom over one mile in length.

The disadvantage of farms too long and too narrow was aggravated in certain parishes by the custom whereby farmers divided their farm lots lengthwise between their sons. This evil was considered so serious by the king of France that in 1745, following complaints made to him by his intendant, he issued a decree in which, after stating that in certain places the people were liable to vegetate on too small farms, he prohibited the construction of farm buildings where lots were less than 288 feet wide. Four years later, on the coast of Beaupré, houses were torn down by order of the intendant because the owners had failed to obey the king's commands. It is true that the seigneurs sometimes saw their own interest in the granting of long and narrow lots, since they were obliged to share in the building of roads.

Other facts which have often been commented upon are the slow progress of colonization of the country while the seigniorial tenure existed and the lack of any sign of influence on the part of the seigneurs on the agricultural methods of the habitants. Studying the matter closely one cannot fail to find, as M. Gérin did, that the results were mostly due to the fact that the seigneurs were practically all soldiers or poor civil servants and were lacking in practical training. Several of our seigneurs had to spend the best part of their lives in arms. Sometimes those seigneurs spent whole years without seeing their estates. The poverty of practically all the seigneurs under the French régime helped to make bureaucrats of those who were not soldiers.

'Hardly was the colony established', writes M. Gérin, 'than the principal families began looking for official positions. In 1636, there arrived two large families from Normandy, the Legardeur de Repentigny and the Legardeur de Tilly, and the Leneuf du Hérisson and the Leneuf de la Paterie, both families united by marriage. The Legardeur took up

residence in Quebec, and the Leneuf in Three Rivers, that is, they divided themselves between the only two then established places, and soon they occupied important public positions. The other most noted settlers, Giffard, Chavigny, Bourdon, Godefroy, Des Chatelets, soon followed the example. And less than ten years later, we find six or seven ruling families in Quebec, all united between themselves, occupying all important places, and in constant conflict with the common people, the chiefs of Ville-Marie and the *Compagnie de la Nouvelle-France*.

'Up to the end of the French régime, up till the English régime, our seigneurs continued to prefer public positions. A remarkable fact in connexion with the transfer of Canada to England was the return to France of a large number of the leading Canadian families, some of these among the oldest in the colony. If you read the correspondence of those emigrants, you will find that their object is to find a means of living according to their tastes. They are leaving because the conquest, in abolishing the French Colonial Administration, has deprived them of their position, their livelihood. And, oddly enough, those emigrants who, returning to their motherland, cannot find there either a position, a job or a pension, come back to Canada to work for the English governors.'

Under the English régime the seigneurs, as a rule, did not seem to have been any more interested in the agricultural development of their estates. The lack of interest on the part of the seigneurs in the improving of the farms of the *censitaires* explains probably better than anything else why the seigniorial system has had so little influence on our rural economy.

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SOME ECONOMIC ASPECTS OF AGRICULTURE IN ARGENTINA

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A PAPER on some aspects of Argentine agriculture prepared by an Argentine would, I am sure, be preferable to the observations made by merely a resident of that interesting and hospitable country for the past four years. But in the absence of a representative from Argentina I am glad to comply with the wishes of the programme committee. I recognize that insistence on the inclusion in the programme of a paper relating to Argentine agriculture is an evidence of a deep interest in, and a tribute to, the great agricultural industry and agricultural export trade of Argentina. I have decided to describe in a most general manner the natural features of the cereal and live-stock zone of the Argentine, some conditions underlying the competition between crop and live-stock enterprises in different regions, and some distinctive features of the farm organization, and, finally, to state some generalizations on governmental policy and activity.

The crop acreages of Argentina are confined to a central productive region generally referred to as the cereal and live-stock zone. This zone is a small part of the geographical extent of Argentina owing to the vast areas of comparatively arid or undeveloped land included within the boundaries of the country. It consists of less than one-fourth of the total area of the Republic, but it is the leading source of the crop and live-stock production of the country.

Bounding this central productive zone on three sides are regions of low agricultural value or in an undeveloped state to date. Patagonia to the south comprises another one-fourth of the total area of the country and is too arid to support more than a scant sheep population except in small districts where irrigation makes fruit-growing possible. To the west and north-west sparse rainfall and mountains reduce pastures to a small carrying capacity and practically confine the cultivation of crops to irrigated districts of limited extent. To the north the semi-tropical Chaco remains comparatively uncultivated and undeveloped except for a recent colonization movement and an expansion of the cotton acreage. To the north-east the land is similarly undeveloped, and excessive rainfall and a

rolling topography may restrict its utilization to chiefly rice, pastures, and tree crops. The Chaco and the north-eastern parts of the Republic undoubtedly have agricultural possibilities, but, to date, with a comparatively small rural population of five million people, there has been little occasion to clear land of timber and to make the special efforts required to bring less productive and less advantageously situated land into cultivation. In general, expansion of agricultural production in Argentina will probably not result from penetration of new lands, or extension of the present boundaries of the cultivated area, but will come about by more intensive and better utilization of the lands within the present area of the cereal and cattle zone, primarily ploughing up pasture land for grain, improving pasture lands, and adopting crop rotations especially in the wheat districts where soil fertility has become depleted owing to continuous wheat-cropping. The water (or western boundary of cultivation) is receding.

The cereal and cattle zone is of rectangular shape extending 575 miles north and south and 360 miles east and west. It includes an area approximately equal to the combined area of the three states of Illinois, Iowa, and Missouri. Almost the entire zone is extremely flat—the word ‘pampa’ means a prairie—and hills in one or two places are landmarks. Trees and wood lots are confined to parks, lanes, and rows of trees along boundary lines which have been set out by hand, and, except for comparatively small amounts of wet and swampy lands, almost the entire region is tillable. It might be difficult to find an area of similar extent with such a small percentage of waste land.

It has been said of Iowa that variation in rainfall can account to a very small degree for differences in farming types, but possibly one of the most distinctive features of the Argentine cereal zone is the great variation, considering the size of the region, in the amount and in the seasonal distribution of the rainfall. It is the key to an understanding of crop specialization and of sharp differences, considering the size of the region, in farming conditions in different parts of the zone. The annual rainfall ranges from more than 40 inches on the eastern side to 18 inches on the western edge of the cereal and live-stock zone—a change which takes place in a distance of about 350 miles. It is difficult to find a corresponding change in a corresponding distance in the Great Plains region of the United States, except possibly in the state of Kansas. The differences in temperature conditions due to the range between the northern and southern limits of the zone, a range of nine degrees of latitude, and

to distance from the ocean are reflected by cotton-growing in the north and oats and barley crops in the south.

There are no soil surveys in Argentina, but some generalizations for the cereal zone are possible. A central region, on which the corn acreage is concentrated, consists of a fertile black silt soil of two feet in depth. It is recognized as one of the best soil types in the world. To the north soils contain somewhat more clay and are less friable but nevertheless very fertile and productive. To the west the soils are both lighter in texture and colour—in some places sandy—and lack the fertility and capacity for almost continuous grain-cropping of the two previously named soils. They become progressively sandier and poorer as they proceed westward. In the eastern part of the Province of Buenos Aires there are low, poorly drained soils, and in the south black prairie soils impaired in many places by the nearness to the surface of underlying limestone rock.

A network of railways radiating from the leading ports of Buenos Aires, Santa Fé, and Bahia Blanca provides the cereal and cattle zone with splendid transportation facilities. With the construction also of concrete highways and better roads, transport to the port cities by truck is increasing rapidly. About three-fourths of the entire corn production of the country is within 125 miles of an ocean port, and it is estimated that the rail haul or truck haul on about one-half of the wheat production does not exceed 100 miles. These broad aspects of the climatic, soil, and transportation conditions underlie variations in yields, regional specialization in crop production, and a wide variety of pasture conditions.

The adaptability of the leading crops of wheat, corn, and flaxseed, of alfalfa and of pasture grasses to these climatic and soil conditions varies greatly. In a central black soil district near the city of Rosario average yields of corn vary from 30 to 39 bushels per acre. Yields of 50 to 60 bushels are frequently secured on many farms, and 100 bushel yields have been reported. The limited extent, however, of this high-yielding corn district is noteworthy. It is a district about 144 miles wide at its greatest width and about 160 miles long. The concentration of the corn production of the Argentine in this high-yielding but relatively small district is indicated by the fact that on the average this district produces 45 per cent. of the entire corn crop of the country. Yields decline extremely sharply proceeding away from this central high-yielding district to the south-west and north-west, and this reflects the relatively small part of the cereal zone which is especially adapted to corn-growing. Inadequate rainfall and

the lighter soils are the primary explanations for these sharp declines in adaptability and yields.

There is a central district in which average yields of wheat vary from 17 to 20 bushels per acre. Proceeding away from this central zone, however, yields decline progressively, and finally are only 5 to 6 bushels per acre on the western edges of the cereal and live-stock zone. In a central district, therefore, both wheat and corn do well, but corn comparatively better than wheat. The result is that corn occupies most of the crop area and wheat forms almost negligible percentages in many localities in the central district. In this district the comparative advantage of corn is outstanding. As indicated above, the yields of both wheat and corn decline progressively proceeding away from this central district to the south-west and north-west, but yields of wheat decline less sharply than corn with the result that the yield relationship of wheat to corn improves. In the south-west and north-west wheat yields are low, but corn does too poorly to provide a satisfactory alternative. There is some rye and barley sown in the south-west, but, as in many other wheat-growing regions of the world, the wheat acreage in this low-yielding region is largely due to the comparative unadaptability of other crops. About half the Argentine wheat acreage is sown in this western region of low yields, but the comparative advantage of the crop is considerable because of the unadaptability of alternative commercial crops.

Flaxseed is grown in Argentina on relatively heavy soils in the eastern part of the cereal and live-stock zone where rainfall is excessive for wheat and where locust damage to corn tends to impair the competitive strength of the corn enterprise. Districts in which the substitution of wheat for corn is practicable are not extensive.

In a pasture country, such as Argentina, pastures should receive primary consideration in an examination of crop competition, but discussion has been delayed because competition of individual grains with pasture in Argentina resolves itself into competition between very specialized types of farming—grain versus live stock. Since very little corn or other grain is fed to cattle in Argentina and there is no necessity to raise feed crops, the traditional cattle and sheep industries are almost entirely grazing industries and are especially influenced by the amount and quality of the pastures. The important position occupied by pastures and by the grazing industries is indicated by the fact that only in the centre of the highest-yielding corn district do pastures absorb less than 50 per cent. of the land area.

The ability of the grazing and live-stock industries to retain such

an important place on some of the best soils is due, in part, to the ease with which alfalfa grows in a great part of the cereal and live-stock zone. The alfalfa acreage in the cereal and live-stock zone is estimated at about thirteen million acres, and no one can see the alfalfa pastures in the Argentine, which provide excellent feed for nine months of the year and some feed throughout the year, without being convinced that this crop is one of the leading agricultural assets of the country, that it is the explanation for the large volume of steers finished exclusively on pasture, and that it is a considerable factor in the successful competition of the grazing industries with grain-farming on a vast acreage. There are also grasses in some districts which provide pasture throughout the entire year and contribute to the economic standing of the grazing industry. Possibly in no phase of Argentine agriculture, moreover, has greater progress and attainment been made than in the breeding of high-quality cattle and sheep. The uniformly excellent type of cattle on the breeding and feeding *estancias* is an outstanding accomplishment and a national asset.

In the productive central district of high yields of corn, flax, and wheat, more of the land is cultivated than in any other district in Argentina, but even here there are many counties where pastures absorb 40 to 45 per cent. of the land area, and one can travel miles through these counties and see mostly pasture and cattle. The north-western part of the Province of Buenos Aires and the adjacent districts in the Provinces of Santa Fé and Cordoba are the centre of the grazing industry at its best, where steers for the English market are finished on alfalfa and on supplementary rye and oats pastures. Here wheat and corn yields are not high, because of lighter soil and lack of rain; alfalfa does well, the water is good, and land values are lower than in the corn zone. Land owners calculate a steer to the hectare, and the well-managed *estancias* in this region are strongly entrenched economically. To the north and to the south of this feeding area, however, pastures are dry for several months of the year, and returns from grazing cattle are much lower. Farther south much of the land is in short pasture grasses, and cattle-grazing is not as remunerative as sheep-grazing. In the latter two districts wheat-farming is slowly tending to displace grazing on the best soils. In these districts the landholdings are large, many are poorly operated, and shifts to somewhat more intensive and better utilization of the land in the form of planting wheat and grain have been—and promise to be—greatest.

In many counties in the east-central part of the Province of

Buenos Aires more than 90 per cent. of the land is in pasture. Most of this region is poorly drained and can hardly find more profitable use than as pasture for sheep and for cattle for breeding purposes. This is a leading source of yearling steers which are shipped or driven overland to the feeding areas to the west to be grown out and finished on alfalfa pasture.

Much of the pasture land of Argentina, however, is capable of growing wheat and other grains, and its utilization as pasture is influenced greatly by the prevalence of large landholdings and, given sufficient capital, the ease with which these tracts are operated as cattle and sheep *estancias*. The capital requirements are considerable in respect to the investment in land, fences, cattle or sheep, but the *estancias* represent much the simplest means of administering large holdings. They are the only means by which the owners can personally direct and manage operations on such large tracts of which the minimum size is about 5,000 acres. The income from cattle and sheep is, moreover, more constant and dependable than from crops, and it is stated that in the five-year period prior to the last year or two of high grain prices the returns from live stock or from *estancias* have been uniformly as good or better than from grain.

Converting a tract of grazing land into tenant grain farms involves other considerations, however, besides that of financial returns. Live-stock grazing has been the traditional source of wealth in Argentina, and there is a social and economic standing associated with it. The *estancias* are institutions reflecting wealth, a manner of living, and, in many respects, an agricultural aristocracy—the closest parallel to which in the development of the United States disappeared with slavery and the large cotton plantations of the south. Shifting to grain farming is the end of personal direction of extensive herds and flocks and more especially of the manner of living associated with the *estancias*. The former *estanciero* is director of actual operations no longer but becomes concerned with administrative matters involving scores to hundreds of tenants, many of whom are difficult and unreliable.

But most observers in Argentina recognize that substantial amounts of the present grazing land of Argentina are being very inadequately and poorly utilized, and that only the wealth of some of the old land-owning families and their income from large tracts have enabled them to carry on as inefficiently as they have and as insensitively to low financial returns, if not losses. Rising land values before the depression enabled many to persist in a tradition and to

postpone changes and adjustments associated with poor management, but since 1929 more and more attention is being given to the better utilization of properties. It is in consequence of these broad developments that the trend of grain farming is slowly upward.

In concluding this discussion of crop and live-stock production in Argentina it should be pointed out that a narrowness of the domestic market and a dependence on foreign markets restrict the volume and variety of the production of special products. The domestic market is based upon a population of 12,000,000 people, but the bulk of the population has a low purchasing power, and the domestic outlets are relatively restricted as to variety and quality of products. The consumption habits of the rural population are built around a very simple diet consisting primarily of beef, bread, and *yerbe-mate*, with vegetables and fruits occupying comparatively small places. One is impressed with the fact that Argentina does not possess the markets for a great variety of different kinds and grades of farm products such as arise out of the requirements of the many cities scattered over the United States. There are only three or four markets of this character in Argentina of which only Buenos Aires has a purchasing power of considerable significance. Even this city provides a relatively small outlet for quality products. For example, although the quality of the milk supply in Buenos Aires is poor, attempts at establishing a market for certified milk have failed. Under these conditions the introduction of new crops or products soon exhausts the local market requirements, and production very quickly attains an export basis with attendant complications and instability in marketing.

The trend of crop acreages during the past twenty-five years in Argentina can be broken down into three quite distinct periods—(1) recovery of the pre-War acreage by 1923, (2) a subsequent seven-year period of unprecedented expansion, and finally, (3) an abrupt levelling off at the high 1930 level. The explanation for the sharp expansion from 1923 to 1930 is found primarily in high prices for wheat and other grains in the post-War period up to 1930 and in part to the greater use of combines. After several years of extremely profitable prices following 1923, cash and share rents reached unprecedented levels, and more and more grazing lands were turned over to tenant grain farmers. Reduction of costs of harvesting by the use of combines, in turn, enabled tenants to increase their acreages and to seek additional lands for wheat. Imports of 1,112 combines in 1921 rose to 7,700 in 1924, and finally to about 15,000 in 1929. In the expansion which culminated in 1930 the total grain and linseed

acreage gained about 13,000,000 acres, or 40 per cent., compared with 1923.

With the sharp drop in grain prices in the latter part of 1930, the status of grain farming versus grazing was completely changed, and the former expansion was brought to a sharp halt. Since 1930, with the possible exception of the last two years of better grain prices, the *estancias* or grazing enterprises have fared relatively better than the grain enterprises.

Forces are slowly at work tending to increase the grain acreages on *estancias*, to convert grazing tracts into grain lands, and to divide the large landholdings, but close observers of the agriculture of Argentina confirm what the statistics since 1930 seem to establish, i.e. some shifting about and inter-changeability in the acreages of each of the three leading crops of wheat, corn, and flax, but the existence of a considerable degree of stability in the total crop acreage and in live-stock numbers. Pear and apple production, however, has expanded rapidly. The exportable supplies of the former have doubled every two or three years since 1932.

As previously indicated, possibly one of the most distinctive features of the organization of agriculture in Argentina is the extent to which crop farming and live-stock farming are separate and carried on as independent types of farming which by their specialization become, in many cases, almost single enterprises. This separation is reflected in a number of respects apart from the actual operations. The terms *estancia* and *chacra*, *estanciero* and *chacarero*, referring respectively to a live-stock farm and a grain farm, a live-stock farmer and a grain farmer, are significant distinctions in Argentina. Probably as much as 75 per cent. of the Argentine wheat acreage is located on tenant farms where pastures for work animals and for a few cows are restricted by conditions of the lease to 10 to 20 per cent. of the rented area. The balance of the production occurs on owner-operated farms where there is a degree of mixed grain and live-stock farming and on *estancias* where some acreages of grain are sown under *estancia* administration. Usually, when *estancia* owners wish to cultivate a portion of the *estancia*, tenant farmers are called in for that purpose, but there are many *estancias* where 2,000 to 5,000 acres of grain are sown by men employed by the owner of the *estancia*.

Travelling through the grain districts one seems to encounter rarely owner-operators but usually tenant farmers belonging to this or that *colonia* or rented tract, and the grain districts seem to be made up of these tracts of 10,000 to 35,000 acres or more, on each

of which there are 15 to 100 tenant farmers according to the size of the tract. Each *colonia* or tract has an administrator or manager watching tenant operations in the interest of the owner of the land.

The explanation for the degree of separation of grain and live-stock farming operations is to be found in the size of the land-holdings. Most of the *estancias* consist of 6,000 to 12,000 acres, but much larger holdings exist. There are 50 families each with holdings in excess of 75,000 acres in the Province of Buenos Aires. Relatively few *estancia* owners care to add to their management and administration problems by hiring additional farm hands and engaging in grain farming on any significant scale. Lack of capital on the part of tenant farmers and considerations associated with tenancy tend to restrict the size of tenant farms to units of large-scale cash grain production—200 to 1,000 acres—and to exclude live-stock enterprises.

Changes in this matter of organization, however, are taking place. There is a tendency to seed more grain on the *estancia*, even if it involves considerable additional administration. Greater use is being made of corn for forage purposes. The necessity to re-seed each year a somewhat larger acreage with alfalfa, since its average life of six or seven years is less than formerly, involves some grain farming. Apart from better utilization of the land a desire for diversification of returns has influenced many to undertake the growing of corn and wheat. A number of large landowners contend that changes of this character are inevitable. In general, when large landowners dispose of a tract of land, they prefer to sell it intact as one piece, but there are more instances than formerly of landowners who subdivide their properties into sufficiently small lots to attract owner-operators. As evidenced in parts of the cereal and live-stock zone, the small owner-operated places tend to become mixed grain and live-stock farms.

Italian and Spanish tenants, mostly foreign born, predominate in the cereal and live-stock zone, but there are colonies of many nationalities—Russian, German, Polish, Danish, and Dutch—in the grain districts. Many of them prosper, and some acquire pieces of land for themselves but in general they continue to operate as tenant farmers. Land values vary from about 13 dollars per acre for western wheat land to 80 dollars per acre for good corn land. Share rents range from 25 to 35 per cent. Since 1929 the returns to tenant farmers in the western wheat districts have been low, and living conditions reflect difficult circumstances, but even in the zones of better yields the living standards of the tenant farmers are

low, and it is difficult in general to reconcile these low-living standards with the general productiveness of the cereal and live-stock zone. The explanation is made that the tenants, mostly Italian immigrants or descendants of Italian immigrants, live much better than they did in Italy, and that lack of education and racial qualities explain their apparent failure to want to live better and to secure more comforts. The fact that they do not own their land and must build their own houses undoubtedly deters many from making substantial investments on their houses, but even with tenants who remain on the same tract of land for many years the living standards do not seem to rise greatly. Differences in racial standards, however, assert themselves. The Danes and the Dutch surround themselves with some of the orderliness and comforts of living standards in the countries from which they emigrated.

Until recently governmental activity in respect to the agricultural and live-stock industries of Argentina has not played an important role. This is probably characteristic of a relatively new and undeveloped agriculture and a relatively sparse agricultural population. Governmental functioning in the rural areas, as yet, is not highly developed; taxes are low; collective or co-operative effort is small; and there is almost unrestricted latitude for individual initiative and enterprise. Private leadership and accomplishment have carried the country forward. Traditionally high import duties, exchange control, restriction of immigration, and administrative regulations and decrees in many fields, are evidences of governmental control and intervention in other fields, which, however, in the case of agriculture have not been undertaken to a significant degree. The fields of agricultural education, research, and scientific services remain relatively undeveloped. There are only a few individuals working in agricultural economics.

Governments all over the world have undoubtedly gone further in respect to legislation and control measures relating to agriculture since 1929 than in any previous period. Certainly this has been the case in Argentina. The most important of these measures was the formation of the Grain Regulation Board organized in 1933, which guaranteed minimum prices for wheat, corn, and flax to farmers. Anticipated losses were provided for by profits from an exchange control plan. Minimum prices were not so high as to involve large losses at the then current market prices, and subsequently world prices improved so that the operations of the Grain Board from 1933 to 1936 must be characterized as unusually successful. Putting a floor to prices in 1933, at a time of distressingly low prices and

instability, had a far-reaching moral and stabilizing influence on the entire country. Good judgement was demonstrated in the comparatively low guaranteed prices established. The operations of the Board were suspended two years ago. A Sugar Commission of many years standing has administered a sliding import duty on sugar, and for about ten years production control has been sufficiently successful to maintain domestic prices of sugar at approximately twice the current world price. Various boards and commissions for the improvement of live-stock prices and marketing practices have been formed, but, as in the case of several of the boards organized after the formation of the Grain Regulation Board in 1933, these have hardly exceeded the educational and regulatory functions of governmental work in many countries. Indicating more concrete extension of governmental activity in the field of live-stock marketing, however, was legislation passed a few years ago providing governmental support for a live-stock producers' co-operative, and more recently the Minister of Agriculture sought legislative approval for governmental support of a producer-owned packing plant. Funds have also been appropriated for a chain of government-owned grain elevators. In spite of these measures, however, control of production and effective administration in this field seem to be alien to this country of wide open spaces and of undeveloped agricultural resources.

RECENT CHANGES IN NEW ZEALAND'S ECONOMIC POLICY

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BEFORE outlining the recent changes in agricultural policy in New Zealand, I think it is essential that I should draw your attention to the salient features of New Zealand's economy, because without that background it would be impossible to convey the full ramifications of those changes.

The history of the white man's organized settlement of New Zealand is less than one hundred years old, and it was a somewhat reluctant British Government that agreed to extend its sovereignty to a group of islands which had been claimed as a British possession over seventy years before. 'For all practical purposes the economic history of New Zealand begins with the arrival of the first Wellington settlers in 1840.'¹

In the first twenty years progress was slow. Distance was an effective barrier against the export of perishable commodities, and, although the pastoral industries were established in this period and the beginnings were made in grain-growing, the prospects of this new colony, 12,000 miles away from the British Isles, were not as attractive as the undeveloped countries much closer to the Western World. It was not until 1862 that the white population reached 100,000 people. The discoveries of gold in the sixties in both the Otago and Westland provinces stimulated the settlement of the country, and in the next ten years the number of settlers jumped to over 250,000. These people had to be fed, and the exploitation of the land was also accelerated.

The gold boom was comparatively short-lived, and once again the colonists had to fall back on the land as their main hope for economic and social advancement. Sheep-raising for wool, tallow, and skins, and grain-growing were the sheet-anchors of the farmer, and the rich timber resources of the country were vigorously and often wastefully exploited. However, had New Zealand been compelled to rely for all time on these products, it is practically certain that she would have remained an insignificant colonial possession of the British Empire.

¹ Condliffe, *New Zealand in the Making*, p. 17.

The turning-point came in 1882 with the discovery that meat could be successfully shipped from New Zealand to England in a frozen state. The first shipment arrived in London on May 24, 1882, and it was a 'prodigious fact', as *The Times* called it, both for the producers in New Zealand and the consumers in Great Britain. This date is the most important in New Zealand's economic history, although the development of this new trade was held back somewhat by the slow-moving downward trend of prices which was not arrested until about 1896. From that period until the outbreak of the War New Zealand poured an ever-increasing volume of agricultural and pastoral products on to the insatiable markets of the world.

The state borrowed freely on the London money market, and, in addition to providing liberal facilities for land settlement, vigorously pursued a policy of railway and road construction. In a country where soil, sunshine, and rain were stauncher allies than men, the future was worth mortgaging. In the pre-War period the growing debt commitments were outstripped by the continuous increase in external trade.

During the War years there was a drop in the volume of exports, but immediately hostilities ceased the state again stimulated the demand for land which became inflated in value and subject to widespread speculation. It has been estimated that rather less than half the land in New Zealand, even allowing for re-transfers, changed hands in the ten years 1915-24. The Government of the day encouraged this speculation by its action in purchasing large areas of land for soldier settlements by voluntary negotiation. From the inception of the discharged-soldiers settlement in 1915 to the end of the financial year 1926-7, £22,627,864 had been advanced to 22,585 discharged soldiers.¹ Little provision was made to control the advance in land values, and both rural and urban areas were affected. A sharp drop in wool prices gave rise to uneasiness in 1921, but dairy produce prices showed little movement, and wool recovered in the next two years. This was the first sign of instability, but it was quickly forgotten as fluctuations in prices were more than offset by increased production and the swelling of the national income by heavy state borrowings overseas.

There was no doubt that the situation was unhealthy, and in the next few years before the disastrous economic depression there were attempts to rectify the unstable financial position of large numbers of farmers, but it was quickly proved that debt commitments, once incurred, are difficult to adjust outside the bankruptcy court.

In a review of the economic and financial position of New Zealand

¹ *New Zealand Year Book*, 1928, p. 426.

in 1928, Mr. Pember Reeves, a former Cabinet Minister and High Commissioner, speaking as Chairman of Directors of the National Bank of New Zealand, stated: 'It cannot be said that New Zealand as a whole is suffering from low prices, dear money, and high costs of production. So far as she is suffering at all, it is from the results of dear land, heavy taxes and rates, too much public borrowing persisted in for many years, and, still more, from too much private debt.'

I have dwelt on this problem of land inflation and mortgage indebtedness at some length because it provides much of the motive for the actions which followed when we were faced with a cataclysmic fall in prices, but before proceeding farther I think I should complete the pre-depression picture with an outline of the volume and nature of New Zealand's production at this stage.

In 1882, the year of refrigeration, our main exports were as follows:

Wool	65,322,707 lb.
Frozen meat	15,244 cwt.
Butter	11,264 cwt.
Cheese	3,553 cwt.
Gold	230,893 oz.
Timber	16,486,901 sup. feet
Grain	4,310,984 bushels

The population of the Dominion was then 561,804. The return for our meat exports was £19,339, for butter £52,088, and for cheese £10,130. The wool clip was worth £3,118,554. At this stage there were over 390,000 acres cropped for wheat, and 320,000 acres were sown in oats. The value of the exports from both crops approached £1,000,000. The total value of the exports was £8,609,000.

In 1929, the year before the break in prices as far as New Zealand was concerned, the classes of our exports which exceeded £1,000,000 in value were:

TABLE 1. *New Zealand's Exports of Live-stock Products in 1929*

	<i>Quantity</i>	<i>Value</i>
		£
Wool	234,955,978 lb.	15,359,206
Butter	1,653,807 cwt.	13,228,027
Cheese	1,779,093 cwt.	7,017,463
Frozen meats	3,336,200 cwt.	9,883,277
(principally mutton and lamb)		
Sheep skins and pelts	1,133,298	1,516,738

Out of a total return of £55,579,063 for our exports, £50,780,113 came from pastoral products, and 80 per cent. of the total exports were marketed in the United Kingdom.

It can readily be seen that New Zealand's export trade was in an extremely vulnerable position in the event of a marked drop in export prices, and an examination of both her external and internal position will reveal an even more dangerous situation. In the year ended March 31, 1929, the total value of production was estimated at £126,756,679, and of this amount only £42,728,835 was unconnected with the production or processing of agricultural and pastoral products for export.

The position was well summed up in the report of the New Zealand Dairy Industry Commission (1934) which commented on our economic structure as follows:

'It has always been apparent to close observers of our economic structure that it is highly sensitive to external conditions. This sensitiveness arises from the facts that the greater part of our National Income is derived from primary products exported overseas, that these products are few in number, that, with the exception of wool, they are sold almost entirely in one market, and that our *per capita* external trade is the largest in the World. The result is that any event which prejudices the successful sale of any one of our major export commodities has immediate prejudicial effects on the farming community. Our lack of diversification both in products and in markets, plus the notorious instability of farm-produce prices as compared with other prices, makes our economic position far more insecure than that of most other countries as soon as there is a check to the expansion of markets or a fall in prices.' (p. 11.)

The course of the world-wide depression of 1930-5 does not need any reiteration from me, but I ask you to note the severity with which it struck New Zealand's unbalanced economy. In the period 1929-35 inclusive the quantity and value of our four chief exports were as follows:

TABLE 2. *Quantity and Value of New Zealand Exports of Wool, Meat, Butter, and Cheese from 1929 to 1935 inclusive*

Year	Wool		Frozen meat		Butter		Cheese	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	ooo lb.	£ooo	ooo cwt.	£ooo	ooo cwt.	£ooo	ooo cwt.	£ooo
1929	234,956	15,359	3,336	9,883	1,654	13,228	1,779	7,017
1930	197,240	7,664	4,037	10,937	1,884	11,854	1,813	6,438
1931	211,719	5,515	4,139	8,893	1,989	10,650	1,636	4,461
1932	238,179	5,743	4,645	8,436	2,186	10,639	1,790	4,951
1933	286,307	7,422	5,203	9,846	2,635	11,649	1,983	4,766
1934	255,797	12,516	4,969	11,887	2,615	10,043	1,984	4,694
1935	222,661	7,097	5,207	12,769	2,789	13,617	1,728	4,377

As you see from these figures of our cardinal exports, the overseas trade generally received an unprecedented setback, and, with an air of general uncertainty and pessimism and the raising of the exchange rate in order to provide a greater monetary return to the farmer, imports contracted even more than exports, and we had a piling up of export credits, even in a depression.

The following official figures for these years graphically illustrate this point:

TABLE 3. *Total Value of Exports and Imports, and Value of Total Production, New Zealand, 1929-35*

	<i>Exports</i>	<i>Imports</i>	<i>Total production</i>
	£000	£000	£000
1929 . . .	54,930	48,734	126,600
1930 . . .	44,941	44,340	120,900
1931 . . .	34,951	26,498	97,600
1932 . . .	35,610	24,646	83,600
1933 . . .	41,006	25,581	83,800
1934 . . .	47,343	31,340	98,800
1935 . . .	46,538	36,317	97,000

As I have stated previously, our national income is extremely sensitive to fluctuations in our export trade, and this point may perhaps best be illustrated by the value of production in the years 1929-35, which is shown in the table above (Table 3).

I have dealt at some length with New Zealand's economy, because without that background it would be impossible to convey the importance of a series of legislative experiments, both by the past Government and the present, which have attracted world-wide attention.

Although there is general agreement that the first manifestations of the depression showed itself in the break in the New York Exchange in the latter part of 1929, no action was taken in New Zealand to meet the new situation until early in 1931. There were several reasons for this seeming delay. The reasons were mainly political, and in addition there was a non-acceptance on the part of the New Zealand farmer that the depression, the fall in prices, was anything but quite transitory.

After the 1930 Session closed in September, the Government set up an Economy Committee comprising members of the Cabinet, but it was not until the Prime Minister returned from the Imperial Conference early in the following year that adjustments were made in an effort to meet the falling price-level.

The first Act to be passed imposed a 10 per cent. reduction on salaries and wages of public servants, and authority, which was duly acted upon, was given to the Arbitration Court, which was responsible for fixing the wages of practically all industrial workers, to reduce general wages by a like percentage. Farmers were already feeling the pressure of debt commitments, and a Mortgagees Relief Act, which was amended and extended on several occasions during subsequent years, was enacted for the purpose of protecting mortgagees, notwithstanding default in payment of principal or interest. On the petition of a mortgagor, the Supreme Court was empowered to: (a) postpone (for not more than two years) the due dates of payment of principal or interest; (b) to reduce the rate of interest chargeable under mortgage; (c) to remit, in whole or part, arrears of interest. Commissions were also set up with a view to encouraging voluntary adjustments between mortgagees and mortgagors.

Income tax and customs tax were increased, and, in furtherance of the Government's policy of assisting the primary producers, land-tax, which had been raised in 1929 on properties exceeding £14,000 in unimproved value, was reduced. For the year ended March 31, 1931, £1,145,617 had been collected in land-tax; under the amending legislation the total from this source was £542,128.

The Sessions of 1932 and 1933 were almost wholly concerned with efforts to bridge the disparity between costs and prices, with special reference to the maintenance of farmers on the land. Three Acts affecting mortgagees and tenants were passed. The Supreme Court was given power to postpone the rights of the mortgagee under a personal covenant or stock mortgage, 'contracting out' agreements between mortgagor and mortgagee were invalidated, and lessees were given practically similar protection in respect of their lease commitments. With the object of settling numbers of the unemployed on small holdings a Small Farms (Relief of Unemployment) Act was passed, under which the Crown had the right to acquire land compulsorily, but the scheme never became significant. A further reduction in salaries and wages, varying from 5 to 12½ per cent., was made, and compulsory arbitration in industrial disputes affecting wages and conditions was abolished. Legislation was also passed reducing the rate of interest on internal government and local-body debt by one-fifth, and this was followed later by a similar compulsory reduction in all interest and rent. These enactments raised widespread protests on the ground that they interfered with the sanctity of contracts. The graduated land-tax was abolished.

Still the gap was not bridged. The Ottawa Conference of 1932

brought agreements for the marketing of primary produce in the United Kingdom, and in the case of meat, in which the principle of quantitative regulation was applied, the results to New Zealand have been beneficial, but export prices which governed the internal price-level were still well below costs. In November 1932 it was estimated by the Government statistician that—

Export prices were 21 per cent. below 1914.

Farm expenditure was 49 per cent. above 1914.

Retail prices were 29 per cent. above 1914.

Wholesale prices were 21 per cent. above 1914.

In a statement to the House of Representatives on January 27, 1933, the Right Hon. J. G. Coates, Minister of Finance, stated that farmers 'have been able to carry on and to maintain production only by failing to meet their fixed charges and by living on capital; but farm maintenance is suffering, and in many cases stock is being sacrificed. If some effective action is not taken, a greatly reduced volume of production will follow.'

In January 1933 the Government made a further effort to close the gap by raising the exchange rate on London. This action was taken, according to Mr. Coates, after 'all suggested methods, such as bounty on exports, remission of rates and land-tax, exemption of farm loans from income tax, and direct issue of credit by the Government, were considered'.

In 1933 the legislation passed by Parliament once again had reference to the special conditions created by the fall in overseas prices for exports. A further amendment to the Mortgagors and Tenants Relief Act gave the Supreme Court power to divide the proceeds of farming operations between mortgagee and mortgagor in cases where a mutual agreement could not be reached.

In April 1934 a Royal Commission was set up 'to inquire and report upon the condition of the dairy industry in New Zealand, and upon all matters incidental or relevant thereto with a view to the enactment of such further legislation for the welfare of the industry and the Dominion as a whole'. The order of reference was almost unlimited in scope. The Commission was engaged almost continuously in hearing evidence from May 9 to August 14, and submitted its report on October 15. From this report emerged the first constructive plan for the rehabilitation of the dairy industry, but I shall omit the recommendations and proceed to the action taken on the report.

Out of this report arose the Agriculture (Emergency Powers) Act

of 1934, under which an Executive Commission of Agriculture was set up with power to co-ordinate and supervise the functions of the produce control boards, and under which the Dairy Board was given authority to regulate the production of dairy produce, and the handling, marketing, transport, and distribution of dairy produce intended for consumption within New Zealand.

The Act also contemplated the expenditure of public moneys by way of grant or loan for the rehabilitation of the dairy industry. The specific purposes for which public moneys might be applied included the reconstruction of dairy factories, the eradication of disease from dairy herds, and the general improvement of conditions in and about dairy farms. Wide powers were also taken under the Act to make regulations for the purpose of giving effect to the recommendations of the Dairy Commission.

A Mortgage Corporation, on the lines suggested by the Dairy Commission, was set up with a capital of £1,000,000, of which £500,000 was held by the state. The Corporation, which commenced business on August 1, 1935, was placed under the control of eight directors, including four appointed by the state, one by the Treasury, and three by the shareholders. The Corporation was given power to lend upon long-term instalment first-mortgages on land and upon stock or other chattels. Advances were restricted to two-thirds of the value of the security, but, in special cases of advances to repay existing loans on farm land, the margin might be raised to four-fifths, the state guaranteeing the loss attributable to the excess over two-thirds. The maximum term for a mortgage was fixed at fifty years, and money was made available to borrowers at 4½ per cent. Mortgages held by the State Advances Department, which had made advances for many years, the Lands and Survey Department, and the Rural Intermediate Credit Board were authorized to be transferred to the Corporation, and the transfers have largely taken place.

In 1935 a wider policy of rural settlement was initiated under the small farms scheme. Provision was made for leases of small farms, and the lessees were given the right to purchase their holdings for cash or on deferred payments, or to take perpetually renewable leases. The principal line adopted has been dairying, because the endeavour is to keep the establishment cost below £1,400 per settler and this amount would be insufficient, for example, to establish a settler as a sheep-farmer on a self-supporting scale. No actual restriction is placed on settlers, who are free to develop side lines. Up to March 31, 1933, 488 individual settlers had been placed under this scheme, together with 265 share-milkers. The total expenditure

to that date was £142,000. During the next three years the scheme was administered by the Small Farms Board which by March 31, 1936, had issued authorities totalling £596,840 and had settled 363 holdings of a total of 24,964 acres. The Board is now definitely concentrating on the development and reconditioning of Crown lands or reverted Crown leaseholds, and since 1936 steady, if unspectacular, progress has been made with the scheme. It may never play an important part in land settlement work, but it offers an avenue for the person with comparatively little capital to set out on a farming career. When the present areas under development are completed, about 51,538 acres, the Board will have about 1,000 holdings under its administration.

One of the important features of the scheme is the recognition of the economic advantage of large-scale development by the most modern methods in place of the settlement of undeveloped land by persons who have neither the capital nor the equipment to carry out an efficient and adequate improvement programme.

Parliament also gave recognition to the tobacco-growing industry, which had undergone steady development and was now supplying a substantial quantity of leaf to local manufacturers and building up an export trade overseas. The Tobacco-growing Industry Act of 1935 provided for the establishment of a Tobacco Board, which has since been constituted, consisting of nine members, including one Government representative, four growers' representatives, and four manufacturers' representatives. Raw tobacco may not be grown, purchased, sold, or manufactured except under the authority of the Board, whose main function is to exercise a guiding influence over the industry.

The boards constituted by legislation and under the control of the Executive Commission were now as follows: Dairy Board, Meat Producers' Board, Honey Board, Fruit-export Control Board, and Tobacco Board. It will be noticed that the marketing of all the substantial categories of New Zealand primary produce with the exception of wool, the only one enjoying a world market, were under boards having extensive powers of control and negotiation in such important matters as shipping freights, brokerage, and regulation of supplies to the consumer.

At the General Election of 1935 the Labour Party won an overwhelming majority of the seats in the House of Representatives, the elected chamber of the New Zealand Parliament, and on the formation of a Government under the Right Hon. M. J. Savage immediately embarked on a radical programme. In the first year of office no less than fifty-nine public Acts were passed, and many

of these directly affected the whole of the agricultural and pastoral industries, but principally the dairy industry.

At the elections the chief planks in the platform of the Labour Party as affecting the rural community were: (1) the guaranteed price for primary produce; (2) a reduction of mortgage liabilities in keeping with prices; (3) the expansion of trade by reciprocal agreements with other countries; (4) minimum wages for farm workers; (5) reduction of interest rates through greater state control of the monetary system.

Price fixation by the state, or by cartels, or by private concerns enjoying comparative freedom from competition, is not a new phenomenon, but it must be admitted that, even in the most advantageous circumstances, the machinery for the maintenance of that price is complicated and difficult to keep in smooth running order. This point is particularly applicable to agricultural commodities, the production of which is subject to incalculable factors and is extremely sensitive to variations in demand as in most cases consumption cannot be for long withheld.

It may be said that the problem of price fixation varies in intensity in proportion to the control the fixing agent has over both production and consumption. New Zealand has had little difficulty in devising machinery for insulating her wheat industry from the vicissitudes of world parity, because normally the total crop does not meet the internal demand and there are no exports. The United Kingdom wheat and sugar-beet policies are also in this category, and New Zealand has guaranteed for some years the price of fruit exports by a direct subsidy from the state revenues, but fruit has filled only a minor role in our export trade.

In the case of butter and cheese, the two commodities on our export lists so far covered by the guaranteed price, the great bulk of our total production is sold abroad. The proportions of total production consumed locally and exported of New Zealand's more important food products are as follows:

TABLE 4. *Proportions of Important Food Products consumed locally and exported, New Zealand*

	<i>Consumed locally per cent.</i>	<i>Exported per cent.</i>		<i>Consumed locally per cent.</i>	<i>Exported per cent.</i>
Butter . .	17	83	Lamb . .	10	90
Cheese . .	4	96	Pork . .	13	87
Beef . .	71	29	Potatoes . .	97	3
Mutton . .	52	48	Onions . .	90	10

It will thus be seen that the loading of the internal price on dairy produce, as has been done in some countries, would give little benefit to the New Zealand producer of dairy produce, and in a period of low prices a subsidy to maintain normal prices would reach a formidable amount. So far we have had two seasons of the guaranteed price for dairy produce, and neither the asset nor the liability side of the financial aspect of the scheme has given any cause for alarm, but it is widely believed that the real test of the policy will come if prices show a marked and precipitous fall.

The Act which put this scheme into operation is the Primary Products Marketing Act, and the title and preamble, which are as follows, express the views of the Government on the question of the guaranteed price:

'Title: An act to make better provision for the marketing of dairy produce and other primary products so as to ensure for producers an adequate remuneration for the services rendered by them to the community.'

'Preamble: Whereas it is considered essential in the public interests that producers of primary products should, as far as possible, be protected from the effect of fluctuations in the market prices thereof; and whereas it is thought that the most effective and appropriate way of affording such protection is, so far as relates to primary products intended for export, to provide that the Government, on behalf of the Crown, shall acquire the ownership of such products at prices to be fixed and promulgated from time to time and, so far as relates to primary products, intended for consumption in New Zealand, is to empower the Government in its discretion either to acquire the ownership thereof at fixed prices or to control the sale and distribution thereof; and whereas it is not feasible to put into operation forthwith any plan or plans to deal effectively with all classes of primary products, and it is considered desirable that in the meantime a plan should be inaugurated in respect of dairy produce (including certain other products usually associated with dairy farming); and whereas, in order to enable the Government to put into operation its present plan with respect to dairy produce and to formulate its plans with respect to other primary products, it is intended to establish a Department of State, to be known as the Primary Products Marketing Department, to be charged with the special duty of marketing all primary products in which the Government has acquired ownership or over which the Government has assumed control, and charged also with such general duties and functions as may from time to time be imposed or conferred on it.'

Under the Act the Government fulfilled its pre-election promise to fix the price in the first year on the average prices for dairy produce over an eight- to ten-year period prior to July 31, 1935. In fixing the guaranteed prices for butter and cheese the Government

took the ten-year average, because this was the highest, and then to cover any possible increase in costs it added £562,000 to the total this average would yield, so as to arrive at the actual price to be paid.

The guaranteed prices fixed were:

<i>For butter</i>	<i>For whey butter</i>	<i>For cheese</i>
12½ <i>d.</i> per lb. f.o.b.	11½ <i>d.</i> per lb. f.o.b.	6½ <i>d.</i> per lb. f.o.b.

The price for cheese was fixed higher than for butter to compensate for the additional costs of supplying milk rather than cream, and for the disadvantage in having no skim milk for pig-rearing. As there is an 'over-run' in butter of something more than 20 per cent., the guaranteed price for butter-fat worked out at 1*s.* 1*d.*, and, owing to the effect of increased production on factory costs this season, this figure was exceeded in the pay-out by the more efficient factories. The guaranteed prices are basic prices and are subject to additions or deductions according to quality as disclosed by the grading points awarded by the Government graders. This is designed to provide a stimulus to more efficient production.

The fixing of the price on the average prices for a number of years is a fairly simple thing, but the Act provided a more elaborate procedure for the fixation of the guaranteed prices in subsequent years. This procedure is laid down in the Primary Products Marketing Act as follows:

'In fixing prices in respect of dairy produce exported after the thirty-first of July, 1937, regard shall be had to the prices fixed before that date, and to the following additional considerations, namely:

- '(a) The necessity in the public interest of maintaining the efficiency and stability of the dairy industry.
- '(b) The costs involved in the efficient production of dairy produce.
- '(c) The general standard of living of persons engaged in the dairy industry in comparison with the general standard of living throughout New Zealand.
- '(d) The estimated cost to the Department of marketing the dairy produce concerned, and also the cost of the general administration of this Act.
- '(e) Any other matters deemed relevant.

'Due regard having been made to the several matters mentioned, the prices fixed in respect of any dairy produce exported after the thirty-first of July, 1937, shall be such that any efficient producer engaged in the dairy industry under usual conditions and in normal circumstances should be assured of a sufficient net return from his business to enable him to maintain himself and his family in a reasonable state of comfort.'

The Act provides that the guaranteed price as fixed by the Government cannot be challenged, and the Courts will therefore never be called upon to determine the meaning of 'usual conditions', 'normal circumstances', 'efficient producer', 'sufficient net return', and 'reasonable standard of comfort'.

From August 1, 1936, the Government of New Zealand became the owner of all the export butter and cheese of the Dominion. The financing of the purchase and marketing of this produce is being done through the Dairy Industry Account at the Reserve Bank, and the produce is being sold by the Primary Products Marketing Department on behalf of the Government.

Before the price was fixed for the second season (1937-8) of the new scheme a special statistical survey was made of production and employment on dairy farms. Some 40,000 questionnaires were widely distributed, and nearly 20,000 complete returns were obtained. On these returns and on other statistical data covering costs, living standards, &c., required by the Act, the guaranteed price for 1937-8 was based. The Government, after examining the position, decided to raise the differential margin for cheese to 2d. per pound for the 1937-8 season, and the guaranteed prices were fixed as follows:

<i>For butter</i>	<i>For whey butter</i>	<i>For cheese</i>
13½d. per lb. f.o.b.	12½d. per lb. f.o.b.	7½d. per lb. f.o.b.

In the first year's operations of the scheme there was a deficit in the Dairy Account of £270,000, and for this season (1937-8) it was estimated, when this paper was written, that there would be a surplus substantially exceeding this figure. It has generally been considered that a deficit in any particular year or years would be held in a form of overdraft until years in which the receipts exceeded the guaranteed price, and this was the opinion of Dr. W. B. Sutch, Economic Secretary to the Minister of Marketing (the Hon. W. Nash), the originator of the scheme. Dr. Sutch writes:

'From explanations given by the Minister of Marketing it has been made clear that the Dairy Industry Account is to act as an equalisation fund whereby surpluses from realisation in "good" years balance deficits incurred in low-priced periods. The benefits of the stabilised price to the farmers themselves should be obvious. The difficulties involved are, however, political, financial, and economic. Politically, it may be difficult to use possible surpluses of "good" years to pay off deficits incurred in the past, especially when the farmers who receive the surplus realised by the Government above the guaranteed price are not necessarily the farmers on whose account a deficit was incurred.'

The Primary Products Marketing Act, which set in motion the guaranteed price, also made radical changes in the marketing organization set up by previous Governments. The Act provided for the setting up of a new Department of State—the Primary Products Marketing Department—directly under the control of the Minister of Marketing and supervised by a Director of Marketing. The principal functions of this department are ‘to make all necessary arrangements’ with respect to—

‘(a) The acquisition, on behalf of the Crown, of all primary products in accordance with the Act, or in accordance with any other lawful authority that may be conferred;

‘(b) The marketing in New Zealand or overseas of primary products, whether or not such products have been acquired on behalf of the Crown.’

The New Zealand Dairy Board has had its functions curtailed and has been made subservient to this Department, while the Executive Commission of Agriculture, set up by the previous Government, has been brought under the Act and may exercise its powers only with the concurrence of the Minister.

The Commission was empowered by legislation to rationalize the supplies of milk and cream received by dairy factories and has been for some time engaged in zoning districts with the object of eliminating overlapping and other uneconomic practices arising from the competition to obtain supplies. As the great bulk of the butter and cheese in New Zealand is processed by co-operatively owned factories, the opposition to this scheme has been only sporadic and isolated.

Alterations have also been made in the method of marketing of dairy produce in the United Kingdom. Under the new arrangement all butter and cheese, with the exception of a quantity under special licence, is marketed under consignment on a commission basis by a panel of appointed agents of the Government.

In a pamphlet on *New Zealand's Labour Government*, which has received official endorsement, Mr. J. Thorn, M.P., writes:

‘The elimination of speculation has been effected by arrangements under which the best elements in the Tooley Street trade handle New Zealand's dairy produce, but no attempt is made to interfere with or control the London price-levels. During this season (1936–7) these levels for butter and cheese have not only rapidly fluctuated, but they have been at such levels as to make a deficit in the Dairy Industry Account possible. The Department's marketing arrangements, however, have had the effect of largely cancelling out the difference in London prices for New Zealand and Danish butter.’

The external marketing policies for meat, fruit, and honey, the other commodities which have been for some years under the control of export boards, have remained practically unchanged, but, as with dairy produce, there have been alterations in the internal marketing system. In the case of honey the alteration led to the resignation of the old board and the appointment by the Government of a new one.

Under the Primary Products Amendment Act of 1937 a department called the Internal Marketing Division was set up, and, in order to establish quickly an organization to carry out the functions of internal marketing of foodstuffs, a trading company with extensive ramifications in this class of business was purchased, and the services of one of its directors also acquired as the head of the Division. Under the legislation the Division has been given powers to control the marketing of dairy produce, honey, eggs, fruit, and any other foodstuffs which may be named by Order-in-Council. One of the first actions of the Division was to regulate the wholesale sale and distribution of butter by licensing a number of dairy factories, merchant firms, or produce distributors, who had been carrying out this work, and fixing a margin of $\frac{1}{2}d.$ per pound as the maximum allowed to cover the cost of distribution to the retailer. The Division has also assumed the monopoly for the importation of bananas and oranges, some of which are grown in New Zealand South Seas dependencies. This fruit is sold on a consignment basis by private auctioneers and brokers. The blending and marketing of honey within New Zealand has also been assumed by the Division which has purchased an existing blending and trading organization. The honey is bought from the producers and after being blended and packed is distributed to the public through 'the recognized trade channels'. The producers are to receive the net proceeds of the sale of this honey on both the local and export markets. Prices have also been regulated for the internal sale of wheat and onions. The wheat scheme is particularly interesting in that not only is the price of wheat fixed, but the prices of flour and bread are also regulated. The scheme and the claims made for it by the Government are outlined as follows by Mr. Thorn in *New Zealand's Labour Government*. He writes:

'Under this plan a Wheat Committee representative of each of these three interests was set up with the Minister as its Chairman. From the wheat-growers all milling-quality wheat was purchased at prices in excess of those ruling for some years previously. The wheat was sold to the millers, and the price of flour was fixed so as to give them an adequate return. Each miller was allocated a share in the total flour trade proportionate to

his share in the previous three years. Flour is marketed on behalf of the millers, and unnecessary freight costs are avoided by a regional distribution plan. Without increasing the price of bread to the consumers, bread prices were also fixed at rates which gave the bakers a fair return.

'The advantages of the plan are that wheat-growers receive increased returns, the millers are relieved from the anxieties of competitive marketing, the bakers are safeguarded against losses in price wars and can therefore fix their attention on efficient production, and the consumers have the assurance of a fair price for bread. All are protected against the disturbances which accompany market fluctuations.

'A small commission on flour sales, and a fractional margin between the buying and selling prices of wheat, meet the administration costs, which are extremely low. When necessary, the Wheat Committee imports wheat, but flour may be imported only under permit.'

It will be noticed that no attempt has been made to interfere with land tenure, or to place any control over the actual production on the farm of any class of primary product, but that the whole of the actions by the state have been confined to the processing or manufacture and distribution of those products. The present Government is building a new structure based on some of the foundations laid by its predecessors which had already given legislative status and authority to Ministers and boards to control the distribution of various commodities, even to the extent of fixing prices. Maximum prices were first fixed in New Zealand in 1915 by the Board of Trade which was set up under the Cost of Living Act of that year, and in 1919 a Board of Trade Act was passed extending the War-time authority into the first hectic days of peace. By an amendment to the Act in 1923 the board was abolished, and its functions were taken over by the Minister of Industries and Commerce whose powers included 'the establishment of fixed minimum or maximum prices or rates for any class of goods or services or otherwise for the regulations of such prices or rates'. Various commodities came under this provision of the Act from time to time, although from 1923 to the advent of the present Government there was a tendency to relax the policy of price-control except for wheat and super-phosphate, which has been continuously controlled since 1931, and use the powers of the legislation to bring about voluntary maximum prices rather than compulsory. Maximum prices were fixed for bread, flour, bran, and pollard until February 1925, when free marketing was resumed, and two years later a sliding scale of protective duties on wheat was introduced. From 1933 to the inauguration of the present system a Wheat Board controlled the purchase and sale of milling wheat.

It will thus be seen that the present Government in its principles of control has departed but little from those in operation from time to time over a number of years. What it has done is to make its ramifications of control more extensive and to play a more active part in the handling of the various commodities. The guaranteed price system for exports has no precedent, and this system is wrapped up with a form of control not exercised by any previous Government—the control of the monetary system. Without a brief sketch of this side of the Government's policy my paper would not be complete.

The Reserve Bank which was set up by the previous administration has been converted from a partial to a complete state institution whose general function has been defined by the Reserve Bank Amendment Act, 1936, as 'to give effect as far as possible to the monetary policy of the Government as communicated to it from time to time by the Minister of Finance'. The Act also provides that 'the Bank shall regulate and control credit and currency in New Zealand, the transfer of moneys to and from New Zealand, and the disposal of moneys that are derived from the sale of any New Zealand products and for the time being are held overseas'.

The Bank has made available the whole of the credit to finance the payment of the guaranteed price, which takes place immediately the Government acquires ownership of the produce, and has already made money available for a number of other state projects.

Another aspect of the Government's financial policy affecting the agricultural and pastoral industry has been the conversion of the Mortgage Corporation into a completely state institution under the title of the State Advances Corporation. The board of management is required to give effect to every written direction given by the Minister of Finance. The Corporation may make loans on mortgage up to two-thirds of the value of the security, but there is a provision that this margin may be extended under Ministerial authority. When the limit is extended, the Corporation is guaranteed against loss by the Consolidated (or general revenue) Fund of the Government.

Another section of the Government's policy relating to the farming community is contained in the Mortgagors and Lessees Rehabilitation Act, 1936. The general purpose of the Act is to enable the Court of Review (a special court established for the purpose) and adjustment Commissions to make a final adjustment of the liability of mortgagors and lessees on the following lines:

- (a) Mortgages are reduced to the value of the security, and the surplus becomes an 'adjustable debt'.

- (b) Rents are reduced to the 'fair rental value' of the property, and arrears of rent become an 'adjustable debt'.
- (c) All adjustable debts are written off, except so far as the mortgagor or lessee can afford to pay them.
- (d) The terms of payment of moneys remaining owing on mortgage and adjustable debts (if not written off) are adjusted according to the financial position of the holder.

In the case of the farmer 'adjustable debts' include (in addition to adjustable debts representing part of mortgage debt or arrears of rent) all his unsecured liabilities. The Adjustment Commissions are at present hearing the great numbers of applicants for relief, but progress reports indicate that the effect of the Act will be substantially to reduce the load of mortgage debt on the farming community.

One of the first acts of the Labour Government was to restore the graduated land-tax which was abolished in 1931. This tax has always been a contentious subject in New Zealand. It was originally introduced in 1891 just after the advent of the Liberal-Labour Government for the purpose of preventing land aggregation and to compel the cutting up of large estates, rather than to secure additional revenue.

In the early stages the tax had the effect of breaking up large estates, many of which were under absentee ownership, but, with the almost continuous rise in prices from the date of its imposition to the War, it never became really burdensome, and it is doubtful whether it played the part many have claimed for it in the trend towards smaller holdings. It is perhaps significant that in other countries where no such tax has been in operation there has been the same tendency towards closer settlement. The rise of the dairy industry, improved farming methods, and a steady flow of state loans to settlers have all played their part in the cutting up of the original pastoral runs.

Except in minor details the system of land-tax in force at the outbreak of the Great War had remained unaltered for many years, but subsequently amendments were made in 1917 and again in 1921, 1923, 1924, 1929, and 1930. In 1931 the graduated scale of land-tax was abolished, only the flat rate of 1*d.* in the pound of unimproved value being retained.

There was no further alteration until 1936 when the present Government passed legislation stipulating that where the unimproved value on which land-tax is payable does not exceed £5,000 the present rate of land-tax is 1*d.* in the pound. This rate is increased

by 1/8000*d.* for every £1 in excess of £5,000, with, however, a maximum of 6*d.* in the pound. This rate stands at the present time, but, owing to the reductions of valuations during the depression, the tax is perhaps not as burdensome as the special imposts which had been introduced in 1929 and abandoned in 1931.

Another action of the Labour Government was to give facilities to agricultural workers to obtain wages and conditions of employment by collective bargaining. Certain types of seasonal workers, such as harvesters and shearers, had been able to obtain collective agreements with employers either by conciliation or arbitration, but the Arbitration Court had always refused to grant an award to general agricultural workers. In one judgement the Court stated the grounds for its refusal:

'The conclusion we have come to on the whole matter is that it is not practicable to make an award fixing the hours of work and wages for general farm hands without altering seriously the conditions under which farming is now carried on. If a strong case had been made out for interference the Court might have felt compelled to make an award on the subject, and to attempt to regulate the hours of work and wages of general farm hands. Such a case, however, has not been made out, and the Court is thus relieved from the necessity of making a perilous attempt to regulate by award the whole farming industry of the Dominion.'¹

Thus the only determining factors in the conditions of general agricultural workers up to 1936 had been the goodwill of the employer and the supply of, and demand for, labour. Under the Agricultural Workers' Act, 1936, minimum wages and standards of accommodation have been set out for practically all classes of general farm labour. The following gives details of the scope of the provisions:

Agricultural or dairy farm workers of 17 years of age shall receive not less than 17*s.* 6*d.* weekly and an additional 5*s.* weekly for each additional year of age until the age of 21 years. Workers of 21 years of age and over shall receive not less than £2 2*s.* 6*d.* weekly, inclusive in all cases of board and lodgings, or where that is not provided, the wage to be increased by 17*s.* 6*d.* weekly. No child under 15 years of age can be employed for hire or reward.

Every agricultural worker who is continuously employed on a dairy farm for not less than four weeks is to be given a holiday, on full pay, of not less than seven days in every twelve weeks of employment or proportionately for less terms of employment. Before the commencement of the holiday the employer shall pay wages for the holiday at ordinary rates

¹ *Book of Awards*, vol. ix, p. 517.

together with an allowance of not less than 8s. 9d. weekly for board and lodgings. The minimum yearly holiday is 28 days. Workers who receive a weekly half-holiday must receive a minimum of 14 full days' holiday yearly.

Employers are obliged to provide accommodation which will not be deemed to be sufficient and suitable unless the following conditions are complied with. Where there are two or more persons the sleeping accommodation to be separate from the dining quarters; there is to be sufficient furniture and utensils and sufficient supply of water for drinking and washing, and provision for lighting, heating, ventilation, and sanitation. Sleeping quarters are to contain not less than 500 cubic feet of air space for every person; suitable provision is to be made for the storing of meat and other perishable provisions; suitable first-aid appliances are to be provided and provision is to be made for the drying of clothes.

An inspector appointed under the Act can at all times enter upon the land or premises for the purpose of seeing that the provisions of the Act are being carried out.

Apart from legislative enactments, government administrative policy plays a large part in New Zealand agriculture. Successive governments have realized how vulnerable the farmer is to economic vicissitudes, and many forms of assistance are available to him from the state. For example, a farmer in New Zealand can obtain the free carriage of lime by rail up to 100 miles, provided the minimum load is six tons. The cost of lime transport under this arrangement is borne by the Department of Agriculture. The Department also pays 40 per cent. of the freight charges on other fertilizers and 12½ per cent. of the freight-rate on certain farm products. Assistance is also given by way of subsidies, and sometimes labour is supplied for the work of destroying noxious weeds, rabbits, and other pests.

The Department of Agriculture, in addition to carrying out regulatory work common to most departments of a similar nature in other countries, maintains a research and instructional service covering every branch of New Zealand's primary industries, and the policy of the Government in this connexion may best be summed up in the words of the present Minister of Agriculture, the Hon. W. Lee Martin:

'In New Zealand, where the foundations of our economy are so firmly planted in the soil, it is imperative that the closest co-operation should exist between agriculture and the State. . . .

'The units of agriculture and pastoral production are necessarily smaller than in the manufacturing industries, and the average farmer has neither the opportunities nor the capital resources of the manufacturer for the economic development of his property. Unlike the factory, he is not

sheltered from the elements, his cycle of production is longer and subject to greater fluctuations and more beyond his control than mechanized processes, and history has shown that prices for foodstuffs and raw materials are subject to wider variations than the returns from manufactured commodities. From these facts one does not imply that the farmer should receive privileged treatment at the hands of the State, but at the same time, if he is to maintain his place in the national economy, the special circumstances of his calling should be taken into account by any progressive Government. . . .

'The trend of the Department of Agriculture in recent years has been instructional rather than inspectorial, and I am firmly convinced that it is along these lines that we can make the greatest advances. The old adage that prevention is better than cure is just as applicable to agriculture as it is to medicine, and in animal husbandry, for example, it is essential that we get as close as possible to this precept. . . .

'It is obvious that the farmer cannot carry out this research as an individual. It must be done on a collective basis, and the State, which must necessarily maintain an impartial national outlook, is in the best position to judge the extent and importance of any widespread collective undertaking. It is, therefore, the duty of the State to make adequate endeavours to eradicate, by research and instruction, any factors which are detrimental to the country's economic and social welfare. It is in such work that the Department of Agriculture is playing a tremendous part, and it is the policy of the present Government to marshal the expert knowledge of the Dominion in a crusade against the problems of the man on the land.'

I have completed an outline of the salient features of New Zealand's agricultural policy. To-day her great problem is not internal. It is external. The forces of production within the Dominion are well organized and capable of tremendous expansion, but her producers are deeply concerned with the limitations of the present effective demand. We have realized since 1930 that there is no bottomless market prepared to pay profitable prices for our exported farm produce, and to-day the emphasis of our national work in connexion with agriculture is being placed on marketing rather than production. The solution we may suggest, and the present Government has put forward a plan of reciprocal trade, but it takes two sides to make an agreement on those lines.

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AGRICULTURAL CO-OPERATION IN CANADA

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THE records of farmers' business organizations at present active show that during the nineties and up to 1915 development of co-operative business enterprises in Canada moved rather slowly. Of the companies now active about one-fifth were established within that period. During the next decade and up to the present time organization in business by farmers has made sound and substantial growth in numbers, membership, and business. Co-operative organizations now hold a useful position in the movement of farm products to market, and they have gained an important place in the field of Canadian business. The activities of the larger organizations, such as the wheat pools and the live-stock and fruit co-operatives, have reached a high stage of development and have received world-wide recognition. In addition to these are hundreds of comparatively small organizations which are working quietly and effectively in serving local areas. Compared with Canada's fifteen leading manufacturing industries, which include the pulp and paper industry, central electric stations, automobiles and petroleum products, farmers' co-operatives rank first in number of establishments, fourth in capital invested, and third in gross sales value of products.

The co-operatives in Canada which have stood the test of time through competition, depressions, crop failures, and other hazards which all businesses must face had their beginning in a small way. As a protest against trade abuses or through seeing an opportunity to make savings, a small but interested group would get together and form an association. As the movement grew there was amalgamation through the federation of locals on a regional or provincial basis, and a number extended their activities to a national or Dominion-wide basis.

Development¹ was probably most pronounced in western Canada where about the turn of the century agitation for the establishment of more complete marketing services to take the place of local

¹ The illustrations used in this discussion with respect to associations and to governmental activity are referred to only as typical of the development that has taken place and the services that are or have been provided. There are many other organizations and services that obviously cannot be dealt with in a brief paper.

co-operative elevators took definite form. The Grain Growers Grain Company in 1906 and the Saskatchewan Co-operative Elevator Company, Limited, in 1913 are familiar examples of the development of this period. They represent what may be referred to as a period of organization along provincial lines. The United Farmers Co-operative Company, Limited, 1914, of Ontario and the Co-opérative Fédérée de Québec, 1928, are other organizations established on a provincial basis. During this period, too, such agencies as the United Fruit Companies of Nova Scotia, 1912, and the Okanagan United Growers of British Columbia, 1913, were created to cover sections of these provinces where specialized industries had grown up.

In the field of interprovincial or regional organization, United Grain Growers, Limited, resulting from the amalgamation of the Grain Growers Grain Company and the Alberta Farmers Co-operative Elevator Company in 1917, and the Canadian Co-operative Wheat Producers, Limited, 1924, with its affiliated provincial units together known as the Wheat Pool, are well-known examples.

Not content with confining their activities even to regional interprovincial endeavours, farmers eventually extended their efforts to include organizations on a Dominion-wide basis. In 1918 the Canadian Co-operative Wool Growers, Limited, was formed with branches in all provinces, and in succeeding years the Live-Stock and Poultry Pools acquired national status. In the case of the latter organizations, centralization proved difficult to maintain, and a reversion to a provincial and regional basis of operation was found necessary, but the Wool Growers Association is nearing the end of its second decade of operation on a national basis. Thus, in a period of little more than half a century, the small unincorporated, and often loosely organized, co-operative associations passed through the various stages of provincial and interprovincial development and emerged with national status. Many associations now active have completed from twenty to thirty years of operations, and not a few are serving their second generation of patrons.

Farmers' mutual insurance companies were among the earliest forms of co-operative undertaking in Canada. To-day there are approximately 350 such companies actively engaged in business with net assets of over \$5,000,000 and unassessed premium note residue of over \$20,000,000. The net amount of insurance at risk is approximately one billion dollars. Approximately 62,000 telephones, or 5 per cent. of the telephones in Canada, are operated by rural co-operative systems in which there is a total investment of \$19,193,394.

Les Caisses Populaires, or People's Banks, were organized under the Quebec Syndicates Act and now operate under the Quebec Co-operative Syndicates Act. The first bank was founded at Notre-Dame de Lévis near Quebec in 1900 by Alphonse Desjardins, and in succeeding years, under the wise direction of the founder, the banks have developed into important institutions in the community life of the province. The essence of the system is based on stimulating the spirit of thrift and saving in a small territorial unit such as a municipality or parish where persons are known to one another. There are over 200 banks in the province of Quebec with a membership of 40,000. Loans granted have averaged 12,000 annually during the last six years with an average value of \$2,500,000 per annum.

The transactions of these banks are those of a mutual company owing to the fact that they generally loan only to their shareholders; these have the right of making deposits over and above the amount of their shares. This dual privilege makes them a savings and credit institution. They are a popular source of credit available to agricultural and industrial classes. The shares are generally fixed at \$5.00 which may be paid in instalments. Both shares and deposits may be withdrawn on demand. The liability of each shareholder is limited to subscription which generally does not exceed \$2,000 per shareholder.

Shareholders and borrowers must reside within the area of the bank's field of operations; the by-laws may, nevertheless, allow shareholders who move away to continue as members of the association without eligibility to office. The larger loans are made upon first mortgage and the smaller ones upon notes. A portion of the loan, capital and interest, must be repaid at fixed periods in such a way as to extinguish the debt within a determinate time.

In Canada there is no Dominion co-operative associations act. Each of the provinces, by a general act or by special acts, provides for the incorporation and granting of powers to co-operative associations. Since 1932 in nearly every province new acts or amendments to existing acts have been passed, and while it would be desirable to have more uniformity in the legislation the recent development indicates the increasing importance and growing interest in co-operative organization.

In five of the provinces new co-operative associations acts have been enacted. In three of the provinces there have been amendments and consolidations, and in six provinces co-operative credit union legislation has been placed on the statutes. Twelve of the enactments were assented to in 1936 or since that time.

The province of Saskatchewan was the first to recognize co-operation in the organization of its Department of Agriculture and in 1913 established the Co-operative Organization Branch. In 1914 the Ontario Government established a Co-operation and Markets Branch, and later other provinces set up machinery to deal with co-operative organization among farmers.

When the Agricultural Economics Branch was established within the Dominion Department of Agriculture in 1929, the object of one phase of its work was to study the farmers' co-operative movement. It was felt that the first step to take should be the acquisition of all the information possible on the activities of such agencies in Canada. To that end, under joint arrangement with the provincial governments, a survey of existing organizations was undertaken in 1931 and has been maintained annually since that year. The information thus obtained forms the basis of a permanent record of co-operative activities.

A Dominion-wide survey conducted in 1932 showed that 95 per cent. of the co-operative associations in Canada are incorporated. This large proportion is due in a large measure, no doubt, to the facilities which are provided in each of the provinces for incorporation under special co-operative associations acts or through the Companies Acts. In general the various co-operative acts provide that a certain number of persons, usually five or ten, may make application to form an incorporated association by submission of the required memorandum to the Registrar of Companies within the province. The registration fees vary between no charge and \$15.00. Stockholding privileges are limited by statute to members, and in several of the provinces there is a limitation on the number of shares a member may hold. Dividends on capital stock are limited to 6, 7, or 8 per cent.

In their marketing agreement or contract with members a number of companies make provision for pooling the products and for the distribution of the proceeds of sale according to differences in quality, variety, or time of delivery of the product. Following this practice a member shipper receives his pro-rata share of the average price realized on the shipments during a given period of time. Statistics on pooling based on a survey conducted in 1932 indicated that approximately 70 per cent. of the marketing co-operatives in Canada pooled returns from farm products which they marketed for their members. In more recent years there has been a tendency to alter this policy. Realizing that the pooling system and deferred payment plan was not workable under the conditions of low prices in 1931

when the farmers needed cash, the western Wheat Pools agreed upon a sweeping change in policy. The pool contract was set aside, and each provincial organization announced that its members might either market their grain through a voluntary pool or else take an open market settlement.

Of the marketing associations surveyed in 1932 a total of 191, or 62 per cent., had contracts with their members, and 118 operated without contracts. The terms of the contracts varied from 1 to 10 years' duration, while a considerable number of the associations had continuous contracts which usually provided for cancellation after due notice had been given. Out of the 191 organizations which operated with contracts 91, or 48 per cent., which represented the largest single group, entered into three-year contracts with their members. Associations with one-year contracts made up 19 per cent. of the total, those with a five-year provision, 15 per cent., and those of continuous operation, 13 per cent. Contracts are made legal and binding by statute in a number of provinces and penalties can be collected for any breach of the terms entered into between the producer and the association.

Of a total of 523 associations which replied to the question regarding limitation of dividends on capital stock 374, or 71 per cent., limited the rate to 6 per cent.; 88 associations, or 17 per cent. of the total number, had a 7 or 8 per cent. limit; and 53, or 10 per cent., reported no limitations. The majority of the marketing co-operatives provide for patronage dividends or refunds.

The great majority of the co-operative associations in Canada are organized on the joint-stock plan with limited liability of members. While original financing was accomplished by sale of capital stock, in many instances, of which the wheat pools are a notable example, the par value of shares is nominal, and working capital, reserves, and surplus have been built up by deductions from the sales price of the product. In general, co-operative acts and by-laws of associations provide that a certain proportion of the surplus on operations be set aside in reserve funds and the remainder be apportioned to members on the basis of patronage.

On the whole farmers' co-operative organizations in Canada have entered the field of business in competition with private agencies without financial assistance from governments. Although exceptions can be cited, for the most part the extent of government assistance has been of an educational nature. Borrowed capital is obtained from Canada's private banking system at competitive rates. The inspection services of the Dominion Department have been provided

for co-operatives on the same basis as for private companies. In 1930 the Income War Tax Act was amended to provide that farmers' business associations organized and operated on a co-operative basis are exempt from payment of a tax on income provided that the value of business with non-members does not exceed 20 per cent. of the business with members or shareholders.

By enacting statutory laws governing the establishment of co-operative associations, governments have given recognition to the usefulness of this type of organization in the economic life of the community. The co-operative associations acts have established the legal status of an organization, determined its powers and limitations, and charted a general course of procedure to which associations incorporated under such acts must conform.

A summary of balance sheets and statements of the business of farmers' marketing organizations is presented in Table 1. A study

TABLE 1. *Summary of Annual Statements showing Financial Structure, Condition, and Sales of Co-operative Business Associations in Canada, 1931 to 1937*

Crop year	Asso- ciations	Places of busi- ness	Share- holders	Total assets	Value of plant	General liabili- ties	Paid- up share capital	Reserves and surplus	Total busi- ness inc. other revenue	Working capital*	net worth as per cent. of total assets
1931-2	795	3,501	379,687	\$000 70,226	\$000 45,607	\$000 22,072	\$000 8,570	\$000 37,805	\$000 145,331	\$000 2,546	66.0
1932-3	686	3,057	342,369	90,003	42,520	43,005	8,224	38,773	115,849	4,476	52.2
1933-4	690	3,223	345,024	104,350	40,432	56,046	8,722	39,590	136,411	7,871	46.3
1934-5	697	3,301	341,020	105,183	38,850	55,306	8,933	40,943	130,384	11,026	47.4
1935-6	781	3,266	366,885	85,751	35,289	34,665	8,954	42,132	158,165	15,797	59.6
1936-7	1,024	3,987	396,918	87,938	36,338	36,685	9,265	41,987	173,927	14,913	58.3

* Working capital, as used in this table, is the excess of assets less value of plant over general liabilities.

of this table shows that the co-operatives maintained their position during the past six years from the standpoint of membership and volume of business and have come through the period of economic strain in an improved financial condition. The decline in value of sales to the low point in 1932 and the subsequent rise are due almost entirely to the changing level of prices.

From 1931 to 1934 total assets increased from \$70,226,288 to \$105,183,565, or by 50 per cent. This was due to increased inventories mainly brought about by the accumulation of stocks of grain. Owing to the fact that the co-operative marketing associations made advances to their members against the product and had to borrow money from the banks to do so, there was a corresponding increase in general liabilities. In the year 1935-6 the co-operatives decreased

their general liabilities by \$20,641,461, or 37 per cent. In other words the companies paid off over twenty millions of debts during the year. This was possible because of the liquidation of inventories, chiefly grain, and the reduction of accounts receivable as a result of improved economic conditions. Assets other than plant, mainly current assets, were reduced from \$66,333,077 to \$50,462,433, or by 24 per cent. As a result of these changes in capital structure, the general financial standing of the co-operatives was considerably strengthened. Reserves and surplus have increased from \$37,805,137 in 1931 to \$41,987,081 in 1936. For all companies regarded as a unit the ratio of assets, except plant, to general liabilities which approximates the current ratio moved from 1.12 to 1.41 from 1931 to 1936, and during the same period working capital increased from \$2,546,691 to \$14,913,876. In other words the co-operatives as a whole have \$1.41 of readily convertible assets with which to pay off each dollar of their total debts to outsiders. The net worth ratio has shown improvement since 1933. In 1936 the members' equity or claim on assets amounted to 58 per cent. This might be expressed tritely by saying that the co-operatives are standing on their own feet.

Too frequently size of business is used as the measure of co-operative strength. It is only when size is supported by a sound financial structure, tested for current and ultimate solvency, that the true character of the business is revealed. Canadian co-operatives have passed these tests and appear to be permanently established in the commercial life of the Dominion.

According to the 1931 census there are 728,623 occupied farms in the Dominion of Canada. The extent of co-operative development in each of the provinces is shown in Table 2. This is based on the 1931 census of farms and the co-operative business reported in 1937. For Canada as a whole the amount of co-operative business per occupied farm averaged \$239. The province of Saskatchewan has the highest average with business of \$477 per farm. British Columbia ranks second with \$374 per farm. The western provinces as a group appear to be considerably in advance of eastern Canada in extent and intensity of development.

The amount of business contributed by the co-operative purchasing of farm supplies by farmers, although comparatively small, makes up an increasing proportion of the total business of farmers' co-operative organizations in Canada. In Table 3 is shown the relative positions of the farm supply business and the total business of farmers' co-operative business organizations in Canada. From

TABLE 2. *Extent of Co-operative Development in Canada and the Provinces as Reported by Farmers' Business Organizations in 1937*

Province	Membership farmers' co-operative associations	Occupied farms in census 1931	Volume of business for crop year 1936-7	Co-operative business per occupied farm
	No.	No.	\$	\$
Prince Edward Island	8,760	12,865	1,490,599	115.86
Nova Scotia	5,997	39,444	2,683,761	68.04
New Brunswick	3,966	34,025	1,241,303	36.48
Quebec	38,859	135,957	12,693,528	93.36
Ontario	29,432	192,174	17,718,146	92.20
Manitoba	45,691	54,199	11,830,588	218.28
Saskatchewan	152,757	136,472	65,069,752	476.80
Alberta	63,216	97,408	27,791,698	285.31
British Columbia	13,850	26,079	9,755,365	374.07
Interprovincial	34,390		23,652,377	
CANADA	396,918	728,623	173,927,117	238.71

TABLE 3. *Relation of Annual Volume of Co-operative Supply Business to Total Business of Farmers' Co-operatives in Canada from 1931 to 1937*

Year	Total business	Farm supply business			Per cent. of total business
		By marketing associations	By purchasing associations	Combined sup- ply business	
	\$	\$	\$	\$	
1931-2	145,331,251	3,622,734	7,042,769	10,665,503	7.3
1932-3	115,849,894	3,540,052	5,239,063	8,779,115	7.6
1933-4	136,411,483	2,245,085	5,143,949	7,389,034	5.4
1934-5	130,384,891	4,042,930	5,198,825	9,241,755	7.1
1935-6	158,165,565	4,725,035	7,808,067	12,533,102	7.9
1936-7	173,927,117	3,537,273	12,304,994	15,842,267	9.1

the low point of 1933-4, when the farm supply business amounted to 5.4 per cent. of the total, the ratio has steadily increased to 9.1 per cent. in 1936-7. The comparatively rapid development in the farm supply business by co-operatives is perhaps more clearly presented in Table 4, which shows the business of each year since 1933-4 increasing by over 25 per cent. from the previous year, with an increase from \$7,389,034 in 1933-4 to \$15,842,267 in 1936-7, or of 114.4 per cent. This is to be compared with an increase of 47 per cent. for the marketing co-operatives. In making this comparison for recent years consideration must be given to the relatively low volume of grain marketed, which has made up a large proportion of the total business of marketing co-operatives.

Since a large proportion of the farmer's income from sales of farm products is turned into purchases of farm supplies of one kind or another, there appears to be a wide field for co-operative development in the supply business if opportunities to make savings are present.

TABLE 4. *Relative Change in Co-operative Farm Supply Business and Co-operative Marketing of Farm Products in Canada from 1931 to 1937*

Year	Total sales value of farm supplies	Per cent. change from previous year	Total farm products marketed	Per cent. change from previous year
	\$		\$	
1931-2 . . .	10,665,503		134,374,973	
1932-3 . . .	8,779,115	-17.7	106,515,215	-20.7
1933-4 . . .	7,389,034	-15.8	128,413,680	+20.6
1934-5 . . .	9,241,755	+25.1	120,419,109	-6.2
1935-6 . . .	12,533,102	+35.6	144,392,527	+19.9
1936-7 . . .	15,842,267	+26.4	156,616,437	+8.5
Per cent. change from low year to 1936-7 .		+114.4		+47.0

During the last two or three years the products of a number of wholesale co-operatives of the United States have entered this country through Canadian co-operative agencies. As yet the amount of business is small, but there appears to be possibilities for growth. The United States co-operatively manufactured farm tractors and cream separators have been favourably received, and a Canadian wholesale co-operative is considering placing an order for United States' co-operatively manufactured refrigerators.

The British Co-operative Wholesale Society has a selling agency in Winnipeg, but, as one of the officers of the Society expressed it, 'The C.W.S. does not get enough business in Canada to pay our representative's travelling expenses'. The inter-co-operative exchange of goods between Canada and overseas countries is apparently a 'one-way traffic'. It may not be generally known that the C.W.S. established a branch agency in Montreal in 1894. This branch office is entirely a buying organization for the English and Scottish Co-operative Wholesale Societies. The annual volume of business has grown from a few thousands in 1894 to over \$25,000,000. About forty types of commodities are handled including farm crops, mainly wheat, dairy products, and fish. The Society states that in 1936 it handled nearly one-sixth of Britain's imports of Canadian wheat and one-third of the imports of Canadian canned fish. The

Society does not buy exclusively from co-operatives, but other things being equal the co-operative is favoured. An office has been opened in Vancouver. It is planned that the Canadian branch will be used as a buying organization for Australian, New Zealand, and Scandinavian co-operatives. This programme is in the process of development.

Perhaps the most interesting and successful development in recent years is associated with the Extension Department of St. Francis Xavier University at Antigonish in the province of Nova Scotia. The field of activity of the Extension Department is mainly among mine workers and fishing communities, although a good deal has been done in rural agricultural areas. In 1928 the Extension Department undertook a programme of adult education. The movement was founded on the idea that education, whatever else it does for men and women, should enable them to live in the widest sense of the term. Education for improvement begins in the economic field which the Antigonish teachers believe is foundational to cultural and spiritual development.

The technique of the 'little group' idea is employed. By this means it is possible to mobilize many people over a wide area at little expense. The small groups are study clubs which meet once a week under the chairmanship of a leader. The generating force is within the University, whose philosophy is, 'expose the study group to an idea, hitch them up and let them go'. Self-help with nature taking her course is the way out. As Dr. Coady, Director of the Extension Department, puts it, 'a philosophical idea is worth tons of data'.

Group study is coupled with action directed towards the ownership and control of the economic processes. The central idea is to get back a sense of ownership among the people. The vehicle by which ownership is to be accomplished is co-operation. After a period of study the first active step is the formation of a credit union, and this has been frequently followed by the organization of a co-operative store or producers' society. The first study club was organized in 1930. There are now 1,100 with a membership of 10,000 persons. Leadership courses have been organized at the University, which have grown from an attendance of 86 in 1933 to 132 in 1938. The first credit union was organized in 1932. To-day there are 142 credit unions with an active membership of 22,000. Total assets amount to \$407,512, and loans to date total \$2,000,000 in round figures. Thirty-nine co-operative stores, 4 buying clubs, 11 co-operative fish plants, and 17 lobster factories with a total volume of business of approximately \$1,000,000 annually have been

established under this programme. The co-operative plan has been extended to hospitalization schemes and co-operative building societies.

Although organization is easy and the real testing of the movement will come 10 or 15 years hence when the idea becomes familiar and grows a little old and commonplace and when private business reorganizes to meet the new form of competition, there is evidence that the work will be lasting. Organization is preceded by months and sometimes years of study. The Extension Department carefully surveys possibilities for success and directs the organization of a new co-operative. Authority to start business must be granted by the supervisor of co-operatives of the Nova Scotia Department of Agriculture. The Department also maintains an inspection service to assist the managers of the co-operatives and protect the interests of the membership.

A number of recent Canadian co-operative developments and problems which have been discussed in this paper and other problems with which time does not permit us to deal may be summarized as follows :

1. Definite progress in co-ordination of facilities and services among farmers' marketing and purchasing co-operatives.
2. Credit restriction by co-operative marketing and purchasing associations. The principle that credit service should be supplied by a separate institution appears to be emphasized more generally.
3. A larger measure of accounting and financial supervision of locals by central organizations.
4. A greater recognition and appreciation by governments of the importance and usefulness of co-operative organization.
5. A realization that there should be more self-help in the financing of the operations of local co-operatives and application of the principle that users of the services should supply the working capital on a proportionate use basis.
6. There is evidence of co-ordination of services between country producer and city consumer co-operative organizations, but this problem thrusts itself forward. To whom shall benefits go? To the producer in the form of a better price, or to the consumer in patronage dividends, or how shall an equitable division be made?

THE MEXICAN AGRARIAN REFORM

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IN Mexico, before the conquest by the Spaniards and even up to recent times, the concentration of territorial property in the hands of a few has constituted a fundamental social problem.

In the time of the Aztecs—the dominating tribe in Mexico, already decadent when the Spaniards arrived—the land was almost exclusively the property of the privileged classes; the inferior classes worked the land for the benefit of the former and could have the use of only very small areas for cultivation.

During the conquest and throughout the colonial period the Spaniards adjudged to themselves, by right of might, large areas of the best farming lands. Thus during the colonial days the same conditions prevailed as existed before the conquest; the land passed from one group of landowners on a vast scale into the hands of another group of wealthy landowners, civilian as well as ecclesiastical.

The Catholic Church, especially towards the middle of the nineteenth century, became the biggest landowner of the country; the Reform War had as its final outcome the nationalization of the ecclesiastical property. This, in the long run, instead of accomplishing a better distribution of the land only brought the transfer of property from the hands of the Church into the hands of civilian landowners.

Later, during the General Diaz régime (1884-1911), the legislation on waste lands, instead of destroying large estates, kept the conditions unaltered and, in fact, strengthened their prevalence to such a point that there were farms as large as a country (up to 2,500,000 hectares, approximately 6,250,000 acres); true feuds where the supreme authority was that of the lord of the territory who dealt justice by his own hand and whose labourers worked under a sort of compulsory work system.

The Revolution of 1910, like the fall of the Aztec Empire, the Independence War, and the Reform War, had a well-defined agrarian character. This revolution, on its victory, was forced to undertake at once the solution of the agrarian problem in order to satisfy the popular impulses.

The uneven march of events, the variations in the rhythm of action,

and certain hesitations and changes in the agrarian policy, which have characterized the attitude of the various administrations in facing this problem and which have originated, to a certain point, changes in legislation, are due to the fact that fundamental plans elaborated beforehand as well as a sound theoretical and doctrinary basis have been lacking. In the most recent stages of the agrarian movement one might mention certain influences of socialistic doctrine which have inspired tendencies such as substituting the system of collective cultivation for the common land allotment. In the early stages of the reform the basis was, on the contrary, of liberal stock.

During the period which we may call the period of agrarian revolution (1915 to date) the agrarian problem has been considered from varying aspects. Concurrently, means employed for its solution have undergone changes in accordance with the various laws and even with the criteria of the persons who have applied them.

The initial leader of the movement was Emiliano Zapata who perseveringly fought against Diaz, Madero, Huerta, and Carranza until he got the latter's government to set the basis for the reform by issuing the Law of the 6th of January, 1915, later declared as constitutional. To date, the distribution of land is ruled by Article 27 of the General Constitution and by the Agrarian Code. The Article establishes that both the lands and the waters comprehended within the national territory fundamentally belong to the nation, which transmits the dominion over them to private individuals and may impress on such dominion the modalities which may be dictated by public interest.

The basic form adopted for the redistribution of the land, from the initiation of the reform to date, has been the donation and restitution of lands and waters to the communities (not to individuals) to be possessed in common, although in the majority of cases the enjoyment of the farming land is individual. The land possessed in common by a village is called *ejido* (common lands) and cannot be sold or mortgaged. The benefit derived by the villagers is conditional, as they are under the obligation to cultivate the land personally. If this is not done, the right to the lot is lost.

Within this basic form and outside of it, various modalities have been introduced in the distribution of land. In accordance with the restitutive nature of the Law of the 6th of January, 1915, it was the intention in the beginning merely to return to the villages such common lands as had been usurped. The first stage of the agrarian distribution pretended thus to have an eminently restitutive character, leaving to a secondary plan the donative aspect of the problem.

This would have given the agrarian reform a much milder character than that which it actually acquired; the idea was merely to restore what had been unduly acquired by the large landowners. But since the titles had been lost (or had never existed because the possession in common dated from the Aztecs), the difficulties at once encountered in order that the villages might prove their ownership originated the first change in the aspect of the agrarian distribution. The next idea was not to restore but to endow all the villages with the necessary lands.

The lands have always been granted to the villages in insignificant portions. Generally the procedure to obtain more land was by the way of demanding restoration; in this way the area to be received was not limited by the law, but depended on the extent of the usurped land. In spite of this, as the villages had frequently increased in population, the lands which at one time were large enough for the necessities of the villagers were not so any longer. As has already been indicated, the system did not succeed. Of all the *ejidos* existing at present, only 147 have received land by way of restitution. Much less sufficient were the lands, in general, when the system of donation was followed; the area of the lots granted by law was insignificant, and there was a considerable shortage of lands available for that purpose among those to be affected within the radius set by law. The Agrarian Code in force ordains that the lands should be distributed in lots of either 8 hectares of season lands or 4 hectares of irrigation lands. The fractioning of land in such small portions is the most serious secondary problem arising as a result of the land distribution. According to the common land census of 1935, the average agricultural lot for the whole country was 3.5 hectares.

Those who have wished to obtain larger lots have had to resort to the Colonization Law, and seldom to the local laws of Division of Large Estates, with the obligation to pay in twenty yearly instalments the price of lands which they have thus acquired. The common villagers have been exempted from any obligation to pay.

At first it was thought that the common lands should serve the inhabitants of the villages merely as an aid to their maintenance and that the villager should continue to work for the neighbouring farmers. This conception made the *ejido* analogous to the *pegujal* or *acuaro* which some landowners used to let their peons (labourers) have, so that they might with the products of their cultivation eke out their maintenance. The *ejido* would therefore weaken the absolute economic dependence of the peon on the landowner, but would not completely abolish such dependence.

The unfriendliness arising between the landowners and the new commoners resulted frequently in the latter being unable to find work as labourers, and they had to depend entirely on the cultivation of their own lots. Thus it was more emphatically proven that the lot as granted was entirely insufficient. It has been said that this lot does not constitute the 'economic unit', both in the sense that it is not sufficiently large to absorb completely the working power of the villager with the help of his family, as well as in the sense that it is not enough land to provide the necessary means of existence to the common-land villager.

The first official acknowledgement of the quantitative deficiency of the donated land was made by President Cardenas in the year 1935. Since then, and without any legislative changes taking place but simply by means of changes in the official criteria, the statistics report a noteworthy increase in the average lot endowed.

Another modality in the distribution of the land which has undergone changes has been that which refers to the rights of the villagers to receive lands. At the beginning too many requirements were necessary. Gradually these were simplified to the point that even the *peones acasillados* of the farms have the right to petition for endowment of lands from the farm where they are working.

One more fundamental change has been made, namely, in the primitive idea that, notwithstanding the fact that the land was common property, the enjoyment of it remained individual (the allotment of land and issuance of the deed being made in the name of the head of the family and the lot considered as his 'family heritage'). The policy has evolved towards collective cultivation in the form of co-operative organization for production, thus abolishing all the boundaries of the lots.

There are two classes of allotments: the economic, which almost always are made on granting the endowment (except in the case where collective cultivation is to be established), and the legal, in which case the lots are deeded. The latter has had, comparatively speaking, rare application, as only some six hundred common lands are at present thus allotted, and now this procedure is applied only in exceptional cases, although at one time there was an attempt to give it considerable impetus.

In the Agrarian Code in force there is still a provision relative to the *patrimonio parcelario ejidal* (common land heritage); but in certain regions there is a marked tendency towards the practice of collective cultivation, fostered by the Law of Agricultural Credit of 1935 which ordains that the credits granted by the National Bank of Common

Land Credit must be for the benefit of common-land owners who cultivate the land in the manner above mentioned.

Another important feature has been the varied intensity of the allotment practice. It has changed during the various administrations, reaching a minimum during the régime of Ortiz Rubic during which the distribution of land was thought to be ended in some ten States of the Republic, this being officially declared in each case by means of a Decree. It is evident that during this lapse of time there was a manifest resolution to put a halt to the distribution of lands; but during the next presidential term the Decrees of the former administration were annulled as they were considered anti-revolutionary, and the intensity of the distribution was renewed to reach an unusual height during the most recent years.

From 1916 to 1918 the donatory activity rapidly increased and was afterwards kept steady until 1922, with the exception of the year 1921 in which approximately double the area of land was granted compared with the preceding years.

There was a new increase from 1923 to 1926. This increase was maintained through 1927 and 1928 to give way to a further increase in 1929, which year marks a higher amount than any of the previous years. From 1930 a decrease took place and continued to the lowest point in 1933 when the figure was less than one-third of the 1929 figure. But in 1934 the numbers were trebled compared with the preceding year, and the increase continued to such a point that from 1935 to 1937 considerably more land was granted than in all the years from 1926 to 1934 (11,683,865 hectares from 1935 to 1937, against 8,257,023 from 1926 to 1934).

Parallel with the donation and restitution of common lands the Government has put in practice other agrarian policies emanating from the Colonization Law of 1926 and from the local Laws of Division of Large Estates. The latter are based on Article 27 of the Constitution, but they have not been issued by all the States of the Republic and, where they exist, they have only rarely been applied. According both to the Colonization Law and to the Laws of Division of Large Estates already cited, the farms must be divided, and the lots sold on the basis of a certain number of yearly payments.

A complement to the above-cited laws is the Law of Idle Lands which provides that, when in a property the farming lands are not worked, any person may petition for their use by means of a rental payment fixed by mutual accord with the owner or, in the event of understanding not being possible, by the Municipality. The Law

of Idle Lands has been in general operation. Unfortunately there are no statistics of the areas taken advantage of in this manner, nor are there any on the application of the Laws of Colonization and Division of Large Estates.

Finally, there are few cases in which the Expropriation Law has been applied to agricultural property, but on this, likewise, there are no statistics.

One of the last and most debated aspects of the agrarian policy has been the constant tendency of the present Government to protect small and medium-size properties, i.e. those where the area is below the limits affected by the Agrarian Code (150 hectares of irrigation land or 300 of season land). This tendency does not correspond to any legislative changes, because the Agrarian Code, as already stated, considers these properties unaffected, although certain cases of violation of the law in this respect took place in order to complete common-land endowments.

What is also very recent, and is being made the object of debates and discussion, is the already mentioned tendency towards the establishment of collective cultivation of the common lands. The number of common lands put under collective cultivation up to the month of May 1938 by the National Bank of Common Land Credit was 500. They function under the name of Local Organizations of Collective Common Land Credit. They have 40,399 active members. These organizations were granted credits in 1936 aggregating \$12,693,662, \$47,896,602 during 1937, and during the months of January to May 1938, \$43,342,847. The credits granted by the National Bank of Common Land Credit to the Local Organizations of Collective Credit represented in relation to the total credits granted by the Bank: 12 per cent. in 1936, 58 per cent. in 1937, and 79 per cent. in the period of 1938 referred to.

The general establishment of collective cultivation in the common lands is considered difficult to attain. The number of collectively cultivated common lands to May 1938, which has already been noted, is insignificant compared to the total number of definite common lands existing at that date, which approaches 12,000.

It may be interesting to quote one of the resolutions of the recent National Reunion of Agronomists held in Mexico during the present year:

'The National Reunion of Agronomists recommends that the effort of making the work of the common lands collective be pursued, as this constitutes an intrinsically revolutionary step, as the common-land owners will obtain from this new system of work an advancement in their

standard of living, and because it will promote a general advancement of farming technique.

‘However, it is to be recommended that this collectivization be not proceeded with precipitately, universally, or without judgement. Work must be made collective, for the time being, only on those common lands which have one or more of the following conditions:

‘1. That the common-land owners be willing; that is to say, there should not be government pressure, but a campaign of conviction and adequate inducement.

‘2. That they conduct mechanical farming. In this case collectivization is the only way out to avoid the obstacle which the small lot presents for the possibility of using agricultural machinery.

‘3. In those cases where the common-land owners have already operated in a satisfactory manner in some of the co-operative forms known as “service”, that is to say, of sale, acquisition, machinery or credit.

‘4. In those cases in which the common-land owners are familiar with the system of work in common.

‘5. That the common lands be granted credit by the National Bank of Common Land Credit, except in the cases where they do not need it.

‘6. When it is possible to exercise the proper official vigilance to guarantee the proper performance of their collective activities.

‘7. In the case of common lands which because of their area can fittingly take advantage of the benefits of collectivization.’

The collectivization of common-land units has been frequently imposed by unavoidable circumstances, as in the case of the Laguna district where, had the common lands been allotted, well-organized exploitation units would have been destroyed, and great expenditure would have had to be made in the construction of banks and canals for the individual irrigation of each one of the lots; this without taking into consideration the difficulty that the area which is irrigated each year is variable, and in the Laguna district, cultivation without irrigation is impossible. Moreover, the construction of banks dividing the lots, besides being uneconomical by itself, would have a deleterious result, because the cotton and wheat cultivation which has been possible in that district with the help of the most up-to-date agricultural machines could no longer utilize these, because not only ‘would the small lots make their use unprofitable, but because the banks and canals would make it impossible. Under these circumstances the allotment of the Laguna district without the establishment of collective cultivation would have brought about a drop in the production accompanied by general poverty in the district.

The units of collective production carry out not only cultivation in common but sale and purchase. These units have branches

of consumers' co-operation as well as established stores. The common-land organizations of consumers' co-operation at present constitute two main nuclei: one in Mexicali, Lower California, which was the first to be organized, and the other in the Laguna district. A total of 7,300 common-land owners are grouped in 91 consumers' co-operative associations. They have received for their operation to 1927 \$340,408, independent of the credits received by these same organizations for production purposes.

The collective enjoyment of the common lands is limited up to the present to very few regions. Individual exploitation is still the familiar system, and very frequently the common-land owners, besides cultivating their own lots, are engaged as labourers on the medium and large properties in the neighbourhood. Only one-half of the common-land owners by the census of 1935 used the common lands as their main source of income (this does not mean the only source); the other half supported itself chiefly on other activities, and the products of the common lands were subsidiary.

The common-land owner, formerly a peon without funds for agricultural exploitation, was forced to borrow funds on very heavy terms either from merchants lending money at usurious rates of interest or from the old farmers who supplied him with agricultural implements.

For this reason and in view of the low interest generally derived from agricultural operations in the country, the Government of Mexico has been compelled to make agricultural credit a state function. To this effect the Government has organized two institutions: one which assists common-land owners, and another which takes care of medium and small farm owners who are in a similar position to that of the common-land owners.

Formerly only one institution, the National Bank of Agricultural Credit, had charge of these two groups, but since the year 1936, by means of a separation, the National Bank of Common Land Credit has been the institution for the granting of credit solely to common-land owners. The National Bank of Common Land Credit was established on the 2nd of December 1935, with a capital of \$120,000,000. The National Bank of Agricultural Credit has at present a capital of approximately \$30,000,000.

The above-mentioned resources are not sufficient by a long way for the needs of these institutions in meeting all the demands for credit. In 1937 the total area under cultivation with the assistance of loans by the two banks was 1,000,000 hectares, i.e. 14 per cent. of the total area under cultivation in the country. The National Bank

of Common Land Credit assisted in the cultivation of a total area of 736,237 hectares in the same year, 1937, which may be estimated as representing 30 per cent. of the total area under cultivation in the common lands and 17 per cent. of the total farming area existing within the common lands.

In addition to the lack of education on the part of the beneficiaries of the credit, the low rate of return on various cultivations due to the climate and conditions of the soil has caused the official agricultural credit of Mexico to sustain steady losses. The institutions have under their charge, besides the credit-granting function, another one of social character: even if the latter justifies the high administrative expenditure, it is not enough to justify the deficiencies in recovery of loans. The recoveries have always been smaller than the credits granted. It may be estimated that the amount loaned by the National Bank of Agricultural Credit which is not recoverable aggregates at present \$25,000,000, without taking into consideration the administrative expenditure. As far as the common lands are concerned, the losses are considerably larger. It may be estimated that there is a sum of \$50,000,000 of which there is very remote possibility of recovery, also without taking into consideration the administrative expenditure. It will not be amiss to mention the loss sustained in the maintenance of the Common Land Banks established in 1926 and liquidated at the end of 1930. Their losses aggregated approximately \$1,000,000.

In short, although no accurate calculation has been made on the subject, it is certain that the effort to establish the official agricultural credit of Mexico has cost the Government more than \$100,000,000 from the year 1926 to date, including the administrative expenditure. To this should be added the expense of the Government in the allotment of the lands, which may be estimated at some \$64,000,000 up to the year 1937. To this figure of \$64,000,000, which is the expenditure of the Federal Government, there should be added the expenditure of the local Governments which have always had special departments in charge of agrarian matters, as it is the function of the Governors to decide applications in the first instance.

It must not be forgotten that, concurrently with the agrarian distribution, the Mexican Government has accomplished and is still accomplishing the task of irrigation construction which is fundamentally useful in a country like Mexico, where in very large areas the principal agricultural deficiency is caused by the scarcity of rain. At present the National Bank of Agricultural Credit has charge of the colonization and administration of the Irrigation Districts already

under exploitation, of which there are eleven to date. In these there are 26,085 colonists settled, having a total of 170,068 hectares of irrigation lands and 133,533 hectares of annex lands which are not farming lands, but grazing and timber. The colonists of the Irrigation Districts are granted credits from the National Bank of Agricultural Credit.

Up to the year 1937, 20,000,000 hectares had been granted for definite common lands (10 per cent. of the total area of the country) out of which 4,600,000 hectares are farming lands (irrigation and season), or approximately 32 per cent. of the existing farming lands. The number of common-land owners benefited is 1,500,000. Common lands represent 42 per cent. of the irrigation lands and 31 per cent. of the season lands of the whole country. Besides, there has been created a numerous class of small and medium farmers, and the latifundia are practically abolished.

The areas opened for cultivation under irrigation have diminished the seriousness of the traditional and periodic calamity of Mexico, namely, poor agricultural years. With larger irrigation areas, agriculture has become less hazardous. The Mexican Government now faces the great problem almost untouched of duly organizing production and of improving farming methods.

NATIONAL AND LOCAL TAXATION IN RURAL AREAS

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THE national government of the United States levies no direct tax on property. Its greatest source of normal revenue is the tax on income, a levy which reaches individuals and corporations coming within its reach, according to law, wherever located. Thus the rural dweller pays a federal income-tax if and when he has a \$4,000 net income. This is seldom indeed. The country dweller may pay a federal inheritance tax, but it is the exception. Indirect taxes strike all and sundry without reference to residence, and the farmers pay such taxes as part of the price of most goods purchased.

Since the main taxes paid by farmers are direct and local we will notice those first. To begin with it is widely, perhaps generally, recognized that farmers' taxes are unfortunately, even unfairly, high. The explanation of this is not the result of any immediate, or intentional, abuse. It must be sought in the unplanned development of institutions which were brought over from Europe by the pioneer settlers, and which underwent transformations, slow and for the most part natural. These economic forces began to go wrong many years ago, but did no serious damage until within this century, and became a matter of widespread concern only since the World War. Before the War farm taxes as such had attracted little attention. In proportion to income they were probably out of line with urban taxes to about as great an extent as at present. On this point there is little available information.¹ However, they were not heavy enough to cause great distress. Now they not only cause distress and disaster, but they are out of harmony with other taxes paid from the standpoint of the ability of farmers and non-farmers respectively to pay.

When the country was new, when our cities were mere hamlets, when the farming communities were isolated settlements scattered through a wilderness—when these conditions prevailed, it was inevitable that each community should stand on its own feet in every particular that could be regarded as local. Thus each little settlement

¹ *Tax Burdens compared.* B. H. Hibbard and B. W. Allin. *Wisconsin Experiment Station Bulletin.* See pp. 17 to 19.

provided itself with schools, with roads, and, at first under compulsion, with a church. As the years have passed, the main responsibility for supporting the two great civic institutions, schools and roads, has remained with the small community. These two institutions have, through the years, absorbed about two-thirds of all state and local revenue. The basis of collection and administration remained persistently small. The most typical school district, from the beginning until into the twentieth century, was a block of land, good or poor, about two miles square. Within this district lived some ten to twenty families. This small group of people out of meagre incomes supported a school. The various colonial and state governments usually donated some land to be used toward the support of education, but so far as the common, elementary schools were concerned such support was small. Neither did the people of the district put much money into schools or roads for many years. For years the schoolhouses were made of logs, cut and put into place by the people interested in the enterprise. The teachers were the products of the schools and were paid, in addition to board and room, some \$5 to \$10 per month. Thus less than a hundred dollars per year sufficed for supporting a school for a year.

Road districts were usually small, often coincident with the school district, sometimes, but with the same effect, a township in extent. The people did the work of road construction themselves. Until within less than a quarter century the great majority of American roads consisted of a grade made of earth scraped up immediately from the sides of the right-of-way. These roads were poor and at times impassable. We no doubt had many as bad as those in England a hundred and fifty years ago which were characterized by Arthur Young as 'execrably vile'.

Then came changes of a profound nature which for a long time were for the most part unnoticed. The city population outgrew the country population. Even more important, the wealth and incomes of the city entirely out-distanced the country. Still more significant than either of these developments, it became evident that incomes were no longer, assuming that they had previously been, dependent upon, and proportional to, property.

It must be remembered that we were wholly, and perhaps hopelessly, committed to the general property tax. This tax goes back in its origin some hundreds of years. It began as a land tax. Later, attempts were made to include all property, but after the rise of the industrial revolution and the transformation of property from its earlier simplicity into many forms, tangible and intangible; public,

quasi-public, corporate, and private; durable and evanescent; owned in fee simple or possessed subject to an equal volume of debt;—in spite of all these changes, we have clung to the age-old doctrine that a man's ability to contribute to the support of his government is best measured by his possessions.

In the first place we call the system of taxation which we use the 'general property tax'. In all cities of any size the value of personal property is much beyond that of real estate. Nevertheless, the tax on personal property is one-tenth, or one-thirtieth as great as the tax on real estate. In fact the term 'general property tax' is now recognized as a euphemism for a real estate tax. Even so the farmer pays taxes on his personal property, to the last jot and tittle. Here is a serious discrimination.

Secondly, property is not a good criterion of ability to pay. A few illustrations will suffice. For example a meat dealer may have on hand from day to day a single thousand dollars' worth of meat. He may have a complete turnover of capital several times a month. His income might be, net, \$5,000 or \$10,000 a year. A department store with a stock of goods worth \$50,000, with two or three turnovers per year, may show no more net profit annually. Yet on the basis of the general property tax the proprietor will, or should according to law, pay fifty times as much tax, and this under a system which is lauded as just if only properly enforced! A more extreme example may be found in the case of a broker, who owns virtually no stock of goods, yet who may have as much income as the meat dealer, or department store owner. In a city with a 20-mill tax these three business men would pay, respectively, on personal property, taxes as follows: the meat dealer \$20, the department store proprietor \$1,000, the broker nothing. That is to say, such would be the case were the law fully enforced. The palpable inequity of such a law is clearly a reason why it is not enforced. But the widespread unenforcement of a law seldom results in either equality, or equity, of treatment.

The first and worst thing to be said about the farm tax situation is that the farmers are subject to the general property tax to the full of its intents and implications, conforming to it in both theory and practice. The majority of the American people still believe that in order to make the general property tax acceptable and desirable all that is needed is the enforcement of it in the city comparable with its enforcement in the country. Nothing could be farther from the truth. Fully and perfectly enforced the general property tax would be an abomination. It is as hopeless as the doctrine of total

depravity. The better it is lived up to, the more will the work of reform be needed.

We are just finishing a study, covering six Wisconsin counties, which undertakes to compare the percentage of net income required on the part of farmers and non-farmers respectively in the payment of their property and income taxes. Substantially all of the property taxes are for county, city, village, and town purposes. The state income-tax is distributed 50 per cent. to the locality of the payer, 10 per cent. to the county, 40 per cent. to the state. This leaves, of the taxes considered in the study, the federal income-tax alone for the general government. This federal tax was in 1929 16 per cent. of the total taxes paid in the six counties. In 1933 it fell to 8 per cent. The share of the state in the state income-tax was 11 per cent. of all taxes paid in 1929; in 1933 it was only 5 per cent. Thus in the former year 27 per cent. of the property and income taxes collected was used outside the six counties; 73 per cent. was absorbed locally. In the latter year the amount taken out of the counties had fallen to 13 per cent., leaving 87 per cent. for local use.

I am speaking too exclusively of Wisconsin to permit the presentation of a true national picture. In Wisconsin we have had, for example, no general property tax for some years, the state being taken care of out of special revenues. In some of our states, the state revenues come from property taxation to the extent of 60 or 80 per cent. Also in Wisconsin we have no general sales tax, which is found in over a third of our states; also Wisconsin has no poll tax.

The farmers pay almost no federal income-tax and but little state income-tax. Of their total taxes one dollar in a hundred paid will take care of the levy on income. The farmer is, however, a heavy taxpayer, and his taxes are paid out of income, but if he knew the rate of payment on his net income, if and when such occurred, required to pay his property taxes, he would start a civil war. The farmers of these six counties pay the bulk of their taxes on real estate, assessed not on the basis of its selling value but so as to yield the required amount of revenue without putting the rate up beyond something like 15 mills. The real estate item in these six counties amounted in 1929 to 90 per cent. of all taxes paid; in 1933 to 94 per cent. So far as the farmer is concerned, the general property tax is clearly a real estate tax. The crux of the whole matter is not what kind of tax he pays, but how much of his income is required to meet the payment.

The net income here used is that prescribed by the state income-tax law and allows for a reasonable deduction of annual expenses

from gross income. Farmers who do not submit actual figures showing the value of farm produce used for family consumption are required to add to their income statement \$90 for each adult and \$60 for each child of the household.

The number of reports submitted by farmers to the income-tax assessor, and used as the basis of the study, during recent years has been small. As a result the basis of calculation is narrower than one would wish. On the other hand there is every reason to believe that the farmers making reports had larger incomes than those not reporting. If this assumption is correct, the findings make a more favourable showing for the present tax system than would be the case were all the farmers to submit reports, since in all reason their tax payments are higher in proportion to their incomes than are the payments of those who now are reporting. If this assumption is not true, the whole tax administration has gone wrong, since it is a major part of its business to ferret out the names of all citizens who qualify under the law to pay income-taxes.

Out of twenty thousand farmers living in this six-county district just about a tenth make income-tax reports. For the year 1929, before the depression, the reports showed an average net income of owner-operators of \$1,717. In 1933 the average income for those reporting was \$848, or barely half as much.

Out of the incomes for these two years, the first of which was one of the best years for farmers since the War, the latter one of the worst, the tax collectors for 1929 took 20 per cent., for 1933, 23 per cent. While it might not be hard to pay a fifth, and more, of one's income to the state out of an ample income, taxes of such proportions as these deducted from incomes which are distressingly low to begin with is a matter of public concern, or at least it should be.

For the whole non-farmer group, for which the sample used (all reporting) is ample, the average taxable income in 1929 was \$2,736, and in 1933 was \$1,697. It may occur to some that these people also had small incomes. True enough they are not princely, but it must be noticed that, whereas the farmers' income represented the full income for the family on nearly all farms, in the city it is not at all unusual for two or three members of the same family to submit income-tax reports and pay income-taxes. Often the amounts of income reported in the city are small, but even in the modest-sized cities of this district there are thousands of clerks and labourers who have little or no property investment but who are earning more than a living and so by paying a few dollars of income-taxes get on the list, bringing the average income figure down to a rather low level. The

most significant consideration is whether or not they can pay the taxes demanded without hardship. The study indicates that, as compared with farmers, the taxes rest rather lightly on the city people.

Within the city group, meaning by the term all non-farmers, 4.2 per cent. of the taxable income in 1929 paid the tax bill, and in 1933, while somewhat higher, only 5.5 per cent was required. Non-farmer taxes are only a quarter as heavy as farmer taxes, judged by the returns made to the income-tax assessor. It may be well to notice at this point that there are three classes of non-farmers as found in the tax returns. First, and preponderantly, the city group, next the village group, and last, a group by no means unimportant, those living outside the city and village limits in rural districts but not farming. These consist of a motley number of people, including a few well-to-do lake-side dwellers, and labourers living on an acre of land outside of a city, raising a garden, and escaping high taxes on a dwelling-house. This group reports incomes three-quarters as large as that of the urban people but pays only a quarter as much tax.

It does not follow that the burden of tax payment on the part of the non-farmers is as light as these findings suggest. To begin with, the city dweller has a home to maintain outside of his business. Expenses for operating a home are not deductible for city people, whereas the upkeep of a farm-house is counted as a farm expense. In our calculations an allowance was made for taxes paid on homes by non-farmers. Even so there is a heavy maintenance expense for a city home, and this is not deductible. The expenses of living in the city are greater than in the country. Consequently, there is a different aspect to the income question in connexion with the two environments. A city dweller with a technical net income of a thousand dollars will find it harder to make ends meet than will a farmer with the same amount. Living may be better in the city than in the country, but it costs much more. Thus, while city incomes are in general much larger than in the country, they must be larger; or the relative standards and customs of city and country life respectively must undergo some fundamental changes. Direct comparisons of standards of living of country and city people, one against the other, have never been made satisfactorily, and probably cannot be made with convincing proofs.

We do not know, aside from the income-tax contribution above noticed, how much federal tax farmers pay. The federal income-tax, of late, yields just a little over a billion dollars, of which the ordinary farmers pay almost none. Other internal revenue, mainly excise taxes, amounts to another billion dollars. Here we have taxes on

liquors, tobacco, proprietary medicines, and so on. Does the farmer use more or less of these things than his proportional share? He probably uses appreciably less, but the easiest way out of the calculation is to assume that he drinks and smokes and doctors himself about as much as others do.

The tariff yields around three or four hundred million dollars a year. Does the farmer pay more or less than his proportional share? Again we resort to an average. By this calculation it would appear that the farmers pay not far from \$25 *per capita*, or \$125 per family, in tariff charges towards the support of the federal government. Undoubtedly the amount is fully as large as this. How much additional cost is included in the rise in prices occasioned by tariff increases in domestic made goods is another matter. On this question there was for a hundred years a violent disagreement between our two major political parties. Now one of them says as little as possible on the subject, and the other appreciably less.

It has to be admitted that the farmers are paying more taxes than they can well afford to pay; that their taxes are higher, relatively, than city taxes, i.e. higher on the basis of the required portion of income demanded. We ask ourselves whether or not anything can be done about it. No doubt something can be done about it. It is inconceivable, however, that, through any efforts on the part of society, changes can be made which will make the payment of farm taxes as easy to pay as are income-tax payments by the well-to-do. To bring this about would require something quite equal to the transformations so easily executed, and happily related, in the world of fairy tales. It would mean making farmers in general prosperous, and incidentally relieve the New Deal of half its programme.

Without waiting for general farm prosperity there are some things that can be done. The first and no doubt the most important step in the direction of tax relief to farmers is the recognition of the fact that the greatest incomes, personal or corporate, within the states or the nation are not made locally. On the contrary, they are made within the sphere of business operations out of which they arise. For example, the big oil companies make their incomes out of groups of states, four, ten, or twenty. The railroads achieve their fortunes, and incur their deficits, within territory bounded by no state lines. General Motors and Chrysler deal in every state of the Union and in most foreign countries. Every wholesale grocer, every publisher, every banker, deals directly or indirectly with people scattered over the nation. The great bulk of business is done in cities. City wealth far overtops the wealth of the country-side.

Our interests are as cosmopolitan as modern business. It is just as much to the interest and advantage of the metropolitan centres that the educational system of the outlying districts be adequate as it is to the interest of these sparsely settled sections themselves. We are definitely waking up to the fact that the major issues of civilization are widespread. Hence we no longer leave to the small road district the main duty of providing segments of national, state, and county roads. On the contrary, we project roads from centre to centre, from coast to coast, taking the needed money out of the larger treasuries gathered from those better able to pay, no small amount being contributed by the users of the roads in the form of motor and gasoline taxes.

Likewise with schools, in a considerable number of the more progressive states education is receiving more and more so-called 'aid' from the state and county. This means that the poor districts may, and in many instances do, have schools about as good as those of the more favoured parts of the state. The teachers get about the same salary in a poverty stricken backwoods school district as in a highly flourishing neighbourhood. But a large part of the expenses of the poor district comes from the well-favoured portions of the state. They may come primarily from the cities. In any case they come from the pockets of those with the larger incomes.

This programme, which is destined to be carried much farther, means a subsidy to the less prosperous farmers (and to others as well). Baldly stated it means that, having settled and farmed land not suitable for such use, we will now contribute part of the cost of living to the people thus victimized and make life for them more tolerable. In other words, we invite them to stay where they are and in part at our expense.

We are to use, in keeping farmers in the country in numbers not needed for production, both aesthetics and anaesthetics. The small, family-sized farm has been too much extolled. In recent years it has been so appreciated as to become a goal in itself, though presumably not the ultimate goal. It will contribute a much needed element of population. It will keep a desirable balance (no one knows what it is) between urban and rural cultures. The farmer is to receive some pay to offset the disadvantages of living where he does not choose to live, in the form of subsidies. He is to get still more reward in the form of psychic income, and incidentally he is to ingest more Vitamen E than is found in the diet of his city cousins.

However, the outlook is not so bad. Having through several

generations succeeded in settling land in order to see whether or not the people could make a living on it, we now have a good start in the opposite direction in our zoning laws and land utilization regulations. Just as surely as we begin to take money from the larger centres to be spent out on the frontier we shall be obliged to prescribe for the administration of such spending. If the farmers' taxes are in part paid by other people, these other people will insist on sitting on the boards which administer the use of the funds.

Raising money for these general purposes of equalizing opportunities and responsibilities will ultimately lead to a tax system based less exclusively on general property. We have clung to this old system longer than has any other nation mainly because we have, until very recently, managed to get along without taxing ourselves heavily. While taxes are light any system of raising them will do. Slowly and painfully we will turn to income and business taxes for a larger share of the required revenues. Real estate taxes will probably not be much lighter, except as necessity compels a reduction to a level which will not prove confiscatory. Farmers will continue, as they have already done in the past, to buy themselves free of tax burdens, entering that blissful state of the burdenless tax—a state as near by as attainable and as desirable as that of Alice and her Looking Glass World.

The conclusion seems inevitable. Farmers' taxes are too high, disproportionately high, due to the misguided faith in the old notion that ability to pay was commensurate with the market value of property held. This untenable doctrine has been distorted by the apparent necessity of taxing farm people on assessments quite beyond values corresponding to capitalized incomes. It will be necessary to bring them down to the level set by decreased incomes, and meet the deficit by dipping more heavily into incomes which are more ample.

SOME REMARKS ON THE LAND TENURE OF THE WESTERN SLAVS

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ALL of you who were present at the last Conference will remember Mr. Ashby's warning in his excellent paper that discussion of systems of land tenure must be affected by the fact that these systems are still related to forms of the family, to systems of inheritance and disposal of property at death, and so on.¹ The discussion we had in St. Andrews demonstrated sufficiently the danger of generalizing some facts as to farm organization and the use of land without paying attention to differences existing in systems of land tenure between the particular countries.

Papers read on this subject at the previous Conferences dealt mainly with English, American, and German conditions. Some references have been made to Roman countries, but only a few remarks were devoted to the system of land tenure among the Slavs.

The origin of the land tenure of the Slavs is to be sought in the joint family called *zadruga*. In this several relatives, married and single, built a big common household; they occupied joint land property and cultivated it in common under the leadership of the eldest of the family. Professor M. Sering, who mentions the *zadruga* or the joint family in his paper 'Land Tenure and the Development of Agriculture', says: 'The patriarchal family has an effect on agriculture similar to that of the German custom of succession, that is, the preservation of the estate.'² This statement, I find, is very important for the right judgement of the development of land tenure among the Slavs.

The joint families survived among the Eastern and the Southern Slavs, sometimes even until the abolition of serfdom. While with the Western Slavs they were early split up into individual families, traces of them are even now to be found. Recently Dr. Obrebski, a Polish ethnographer and sociologist, who has done considerable field-work in Yugoslavia studying *zadrugas*, discovered them still in existence in some parts of eastern Poland. Along with the joint family we find the joint cultivation of land disappearing. But this does not necessarily mean an end to the joint ownership.

¹ *Proceedings of the Fourth International Conference of Agricultural Economists* (Oxford University Press, 1937), p. 88.

² *Ibid.*, p. 84.

Different systems of land tenure originating in the joint land property of the family community developed with the Eastern and the Western Slavs. With the Russians we find, at the beginning of the twentieth century, community ownership with individual cultivation of land as most common. Village community (*mir*) authorities apportion to heads of individual families shares of farm land which are determined by the legal custom or the so-called *obsczyna*. According to the rules of this legal custom, shares of land are subject to revision in accordance with population growth, so that every nine or twelve years, and so on, land is being redistributed.

Stolypin, the well-known Russian Minister, in the first decade of the twentieth century tried to dissolve land property communities and to introduce a new system of land tenure based on individual ownership. The land reform he started was executed with great vigour. If continued, it could have changed the appearance of rural Russia entirely. But the Great War and the unfavourable reactions on the majority of the peasants disturbed the work initiated by Stolypin. People stuck to their old traditions of village community ownership and to the legal custom of the *obsczyna*.

The lack of strong individual land ownership in the past was probably one of the main reasons why the bolsheviks won the Russian peasantry so easily for their ideas. They were propagating community ownership along with the seizure of the estates of the nobility, and this meant to the peasant nothing more and nothing less than greater shares of land for his own use. People certainly did not think at that time that they would be forced into collective farming.

Despite its common origin from the land property of the family community, the system of land tenure of the Western Slavs developed along entirely different lines from that of the Eastern Slavs. Instead of community ownership we find everywhere individual cultivation combined with occupying ownership as the system of land tenure which rules almost exclusively. Tenancy, particularly share tenancy, is very unpopular with the Western Slavs, and owner-operated farm units constitute the rule.

Since the abolition of serfdom, which in this part of Europe was rather severe, personal freedom has been held in very high esteem by the West-Slav peasant. Any restriction of private ownership is highly unpopular as reminding people of serfdom. And people are inclined to look upon such restriction as a danger threatening the personal freedom established for the country population in this part of the world not so long ago.

With the conception of private property we notice a combination of some ideas that differ from German as well as from English and American. People look upon farm land not as real but rather as personal property. They do not think of it in terms of units which should be indivisible if necessary for the successful running of a farm. This becomes comprehensible as soon as we compare how genuine customs of inheritance work with a German, an Anglo-Saxon, and a Pole.

A German in conformance with the law of succession which applies with some modifications to all Germanic countries of the European continent, will leave his farm unbroken to one only of his children, giving him an exceptional preference in order to preserve the whole of the farm unit. An Anglo-Saxon is likely to have every child sharing in the property he leaves on the basis of equal rights. But for the sake of it he will not think of destroying an efficient farm unit or of having all his farm land divided up and distributed in order to make sacrifice on the altar of equality. But with a Western Slav it is quite typical to be anxious about strict equality. Thus, even if he disposes of several items of property, he will be inclined to assign to each of his, say, five children one-fifth of his farm land, one-fifth of a town house, one-fifth of his money, and so on. And if he owns several pieces of land he is likely to apportion a patch of each to every child.

Economic progress was not, of course, without influence upon the system of land tenure. It caused some changes in customs of inheritance, and we find at present deviations from the genuine custom. Some parts of Poland and Czechoslovakia adopted, for instance, the German custom of succession. But big areas of Poland and Slovakia still stick to the old tradition.

Dense rural population and lack of industrial cities able to absorb the growing country surplus are given by many authors in explanation of the existing system of land tenure, the continuous subdividing of farm land, and the impossibility of checking it. It is well enough known that the proportion of the population engaged in agriculture varies considerably from country to country. In England it is at present some 8 per cent., and in Germany it does not exceed 20 per cent., but in that part of Europe I am referring to it is around 60 to 70 per cent., and it has been, since the War, almost stationary. The ratio of rural to urban population likewise has not changed in eastern Europe since the War. During the same period the birth-rate has not shown any tendency to decline as rapidly as in north-western Europe or North America. Thus, while some highly industrialized

European countries are making efforts to induce a back-to-the-land movement, all the East-European countries are confronted rather with the problem how to bring about just the opposite and make people start city businesses. This has been perhaps of greater importance for Poland than for any other country, and it has led to the opinion that further economic development depends upon a successful solution of the problem called rural overpopulation. There are, however, differences of opinion among scholars as to the causes of this problem and as to the ways by which a solution is to be brought about.

First as to causes; we notice two opposite points of view. Some look upon the genuine Slav custom of inheritance and the system of land tenure as a great handicap to economic progress. They point out the marked contrast with the Germanic countries. They insist that institutions originating in the joint family have caused the expansion of a system of land tenure which favoured sticking to land but has been unfavourable for the development of urban industrial culture. On the other hand, some deny that any relation exists between the customs of inheritance, the system of land tenure, and the population problem. They would insist, as already mentioned above, that the lack of industry made the subdivision of land unavoidable.

It seems to me to be true that at the present stage of development rapid checking of further subdivision of land by means of a compulsory shift in inheritance laws might create a very precarious situation; it would in all probability decrease the number of the partly unemployed small holders and increase at the same time the number of the fully unemployed in rural districts. But it does not follow that the same objection was equally important in the past. I should say that there is enough evidence to show that the mental attitude of the people, which changes but slowly, was responsible for the fact that urban industrial culture did not grow. And legal steps taken in the past to improve the system of land tenure and to induce the urbanization process failed because they were in opposition to the mental attitude of the peasant.

It is not surprising that entirely opposite reasons given to explain rural overpopulation and the existing system of land tenure imply correspondingly different ways of solution. I do not intend to discuss the alternatives extensively; they concern us only as far as they bear on the system of land tenure. On the one hand, we find supporters for a further redistribution of land and for provisions to meet the rising demand for land caused by population growth. Any

stocks of land, they say, particularly those which are still available under the law of land reform, should be directed towards creating the maximum of self-sufficient land holdings. On the other hand, the opinion is being expressed that an increase in land supply, under circumstances unfavourable for urban development, has resulted in stimulating the growth of rural population. Where the attitude of people, it is said, is for sticking to the land and not leaving it unless forced, plenty of land affects population in a way which might easily be compared with the effect of prosperity in city business. Thus it increases the number of marriages, and works to an end just contrary to any improvement of the system of land tenure, and gives no solution of the rural overpopulation problem. Similarly, supply of land under the law of land reform, conducted as a means of solution of the population problem, may fail.

Let us now see whether changes which have occurred in land tenure may help in giving a positive answer to the question raised. These changes have for a considerable time been related closely to the trend of emigration both oversea and seasonal. Since the last decade of the nineteenth century sums sent home by Polish oversea emigrants alone are estimated to have amounted to some \$50 million yearly. What strikes the scholar studying the influence of emigrants' savings upon the economic development of the country is this: while at the time of the abolition of serfdom there was a considerable proportion of land in estates conducted either as middle-sized farms by the owners themselves or as large-scale farms conducted by paid managers, at the later date savings of oversea and seasonal emigrants were used largely for buying off the farm land from the estates, leaving the estate forest land intact.

These investments, however, differed in different sections of the country. In sections where the prevalent customs of inheritance were unfavourable to the subdividing of land and helped to preserve the farm unit of the peasant, savings were directed accordingly. They were used to strengthen the position of indivisible peasant farm units and to induce the migration of population from country to city.

On the other hand, in sections where the universal custom of inheritance favoured the dividing up of the property in kind into equal shares, savings did not stop the tendency towards continuous subdividing of land. They even strengthened it, and a study of the evolution of land communities which comprise former estates broken up by means of emigrants' savings gives adequate evidence that the buying of the estate land in these sections of the country did

not check rural overpopulation at all. It even aggravated this problem, as migration from country to city had been slowed up and the number of marriages had been increased.

This, of course, does not mean that the estate farms which were broken up should have been preserved. As a matter of fact it only supports the opinion that differences in ideas relating to private ownership are mainly responsible for differences in systems of land tenure. The latter may not only influence the migration from country to city. It may influence even the rate of rural population growth and thus have a twofold effect upon the density of rural population. Finally, what I wish to emphasize is that a readily accessible land supply may have different results according to the system of land tenure and the custom of inheritance which prevails.

So far I have dealt with private land supply only. I do not, however, see why public land supply should have entirely opposite results to the private one. Neither do I think that a readily accessible land supply created under the land reform laws of several East-European States should be an exemption in this respect.

Turning now to these land reforms, which must be classified as social control of land, I would draw your attention to the fact that they have unintentionally become, in some respects, a substitute for emigration. In order to comprehend this it is necessary to realize that, though proceeding on different lines, all these reforms had common political aims. The real intention was to strengthen the Governments of the newly established States lying on the border of Soviet Russia and to help them to avoid being overrun by the bolsheviks. With this idea in mind the Governments of the respective countries looked to the peasants who form the huge majority of their populations. As peasant masses were eager to get as great shares of land as possible, the encouraging of the private land ownership of the peasant at the expense of the estate owners became the method of promoting individualistic ideas and of making people immune against the bolshevist ideas. Thus, in somewhat different ways, a readily accessible land supply, which seemed to be essential, has been created.

You may imagine that the final effects of this social control of land upon the system of land tenure and upon the population structure may prove as different as those of emigration were. It is very difficult to judge the results definitely at this early date. Years may still go by before scientific assessment will be possible.

RECENT AGRICULTURAL EXPERIENCE IN EIRE

J. JOHNSTON

Trinity College, Dublin, Eire

I WOULD like to make a few general remarks of a somewhat personal and general character before attempting to give some of the simpler facts relating to the agricultural experience of my own country in the last six years. I am, as you probably know, primarily a college don—that is, a Fellow of Trinity College, Dublin—but I have also, during much of my life, been active as a popular lecturer in economics. Also, during a certain number of years, just before and just after our recent dispute with Great Britain, I happened to be living in the country and carrying on a small 20-acre farm as a hobby, so that I ‘got a line on’ the agricultural point of view and on the agricultural situation from a very intimate and rather painful personal point of view. That being so, I am a person of multiple personality, and the reaction produced on me by my personal losses, when this beastly economic war deprived me of about £200, was that it turned me into a politician and made me become more active than ever in the matter of public speaking. Generally I criticized the economic policy of our Government, until in the end that brought the unexpected result that I was elected to represent the University in the Senate of Eire. When I speak, therefore, I never quite know which one of my manifold personalities will come to the front, but I rather suspect that the politician is the most on-coming of them.

At the beginning of the economic war I had occasion to take part in a debate in which a minister of our Government was also present. I suggested to him then as a very good idea that I would undertake to teach him and his Government all the economics that they would learn in the course of the economic war. My modest fee was a 1 per cent. commission on the financial saving through learning from my tuition instead of from the harsh experience of the economic war. At a moderate estimate the net loss to Eire from the six years economic war with Britain was some £50,000,000, so that I personally am a creditor of the Government to the extent of £500,000 (1 per cent. on £50,000,000), which debt I propose to exact to the uttermost farthing. Now I regard the allowance which I receive as a senator of Eire as some set-off against that £500,000, and at present the account stands at £499,904 due by the Govern-

ment to me, and I expect that that debt will be completely paid by the time that the British debt to America has also been liquidated!

Now in spite of the fact that the economic policies of our Government at home have been of a kind to turn the hair of economists grey, we have nevertheless maintained most friendly personal relations with the people who are responsible for those policies. One curious proceeding of our Government was that about four years ago they appointed a very strong and very representative Banking Commission to inquire into the whole financial and economic policy of the State. In the course of four years, after a most diligent investigation, that Commission has produced an elaborate and well-documented report which, looked at from my point of view, is the most devastating criticism of the whole economic policy of the Government which established the Commission. It is, I think, altogether to the credit of our Government as a democratic government that it had the curiosity to see what the other fellow might have to say about the kind of policies it furthered.

Generally speaking our national economic policies in the last six years were aimed at producing a condition of economic self-sufficiency. We travelled in the direction of economic self-sufficiency, and we were not alone in seeking to travel in that direction. I rather think that, for a few years at any rate, the United States Government was trying to achieve a position of greater economic self-sufficiency. That reminds me of a story of an American tourist who gave a lift to a west of Ireland peasant who was rather a half-wit, having been a shell-shock victim in the Great War. As the tourist was driving the car pretty fast he turned round presently to Paddy and said: 'Paddy, am I going too fast for you?' To which Paddy replied: 'Sure, Hell to your sowl, amn't I going as fast as you are?' In other words, we were travelling as fast as any country in the world in the direction of self-sufficiency from 1932 to 1938, and we find at the end of that time that the goal we were seeking to approach is unattainable and that our economic future is more dependent on the welfare of our agricultural export activities than ever before, while at the same time our efficiency as an agricultural exporting country has been seriously undermined.

A few facts, then, about our general agricultural position. Half our gainfully occupied population is engaged in one capacity or another in agricultural production. That is to say, about 650,000 of our people are gainfully occupied in agricultural production, of whom about 130,000 only are working for wages; the rest are working on their own or are family workers. Half our population is

employed in agriculture, but in the best of times, and I speak now of about ten years ago, that half obtained only a third of the national income. In the worst of times, which took place between 1932 and 1936, that half obtained less than a quarter of the total national income. Another important fact is that agricultural exports amount normally to half the total output of our agriculture. In other words, as compared with most countries in the world, the export interest of our agriculture is relatively high in proportion to our total agricultural output. Half our agricultural output is normally exported, and only about a sixth of our agricultural output is consumed by the non-agricultural community at home.

Another point which will give you some idea of how we stand in comparison with other countries is that ten or twelve years ago the net output per person occupied in agriculture was in our case somewhere between £90 and £100 per head, as compared with a figure of about £150 in the case of British agriculture. In 1938, after six years of this economic strangulation, the net output per head had fallen from somewhere between £90 and £100 to somewhere between £60 and £70. Another way of looking at the same thing is: There are about 400,000 farm exploitations or farming units in the country, and their output per farm is in the region of £100 a year now. When we were prosperous ten or twelve years ago, it was about £140 or £150 per farm. I notice that the output per farm of United States agriculture is now in the region of £200 per farm, and you call that a depression. If we could get back our output per farm to anything like £150 per farm we would call that almost undreamt of prosperity.

Another point of interest is that the 130,000 people who work for wages are employed by only about 50,000 farm employers. In other words, the number of farm owners who are employers of wage-paid labour is a small proportion of the total number, and their political influence in the country as a whole is less than zero. Wages about ten or twelve years ago averaged about 25 shillings, or \$6, per week. In consequence of the depression and the economic war they fell to 21 shillings a week in 1934 and are now very slightly above 22 shillings. The fact which I have mentioned, the net output per person employed being now somewhere in the region of only £60 or £70 a year, affects decisively the possibility of raising the wages of agricultural labour employed on the larger farms. Clearly you cannot pay agricultural wages which average higher than the total output per person of every one engaged in agricultural production.

In spite of all, the financial and economic system in Eire managed to retain its stability, and there was never any danger that our Irish

pound, which is an independent monetary unit equal to the pound sterling, would lose its parity with sterling. I think one of the reasons for that is that our agriculture was remarkably little financed by external borrowing from any source whatever. The capital value of the wealth invested in agricultural production in respect of stock and farming equipment varies between £70,000,000 and £40,000,000, and you can call the capital value of the land itself and buildings anything you like up to £200,000,000. All that, in the main, is owned by the people who exploit it, so that the extent to which we were dependent on external borrowing for agricultural exploitation was remarkably little. We were able therefore to afford the luxury of an economic war without bringing about a financial crash; it only had the effect of seriously reducing the standard of living, especially of the agricultural population. The indebtedness to banks is only a matter of about £30 per farm, compared with a figure of about £300 or £400 in the case of the United States of America.

The general problem of the relations between agriculture and industry is one of hoary antiquity like the walls of Athenry. If I may interrupt the proceedings in order to tell a story, Athenry is a town having walls going back to the medieval period. It occurred to a local contractor for road-mending that it would be a good idea to use the material from these walls as road metal. He put the suggestion to the local town council, and some member of the town council, more culturally interested in antiquities than others, objected on the grounds of the hoary antiquity of these ancient walls, to which the contractor gravely replied: 'Not at all, that's all nonsense. Any antiquity these walls ever had, they have lost it long ago.' This problem of the relation between agriculture and industry is one of hoary antiquity and has appeared in many forms in different stages of our history. I do not want to go into it in detail now, but I do suggest that, whereas in the eighteenth and the first three-quarters of the nineteenth century the Irish farmer was exploited by an intolerable land system, we now find ourselves in a situation in which urban economic interests have succeeded to the position of the landlord as exploiters of the agricultural interest. In fact, I have gone so far as to say in print that our urban economic and industrial interests are a vampire battenning on the vitals of our decaying agriculture.

That situation is not peculiar to us, and it arises ultimately, as has been pointed out here, from the fact that competition has preserved its reality all too successfully when it is a question of selling agricultural products, whereas monopoly in one form or another has dominated more and more all the economic interests that are

associated with non-agricultural production and commercial distribution. That impact of monopolistic non-agricultural production on competitive agricultural production has the effect of enabling the non-agricultural interests to exploit the agricultural interests. Economic exploitation is essentially a case of the exploiting interests exacting something—a tribute—from the interests which are being exploited. If it were levied by the public powers, it would be called taxation. If there is no other way of getting over that situation of economic exploitation, the state is to my mind justified, not only ethically but economically, in using its taxing power in order to reverse the operation of the economic exploitation. In other words, tax the exploiting interests and use the money to some extent to add to the incomes of the exploited interests. I think that that is only equitable, although regrettable that it should have to be resorted to. It is also necessary to the general economic health that the commercial terms of exchange between agricultural production and non-agricultural production should maintain a healthy position and should be such as to encourage both agriculture and industry to maintain an even uniformity of development and progress.

As I see it now, if agricultural wages and agricultural incomes generally are to rise, it seems necessary to revive the continuous drift of surplus agricultural labour into non-agricultural occupations, because the only possibility of increasing income per head in agriculture, on the assumption of a fairly stable consumption per head of agricultural products, is to have less and less people engaged in producing a uniform or only slightly increasing total volume of agricultural products. In order that labour should flow from agricultural production into industrial production there must be greater flexibility of prices and wages in the non-agricultural activities—greater economic flexibility, greater willingness to absorb labour at slightly lower wages if that is necessary.

The natural instinct of the national state in dealing with a situation of economic disequilibrium is to restrict production, whereas, from the theoretical point of view, the problem really is to adjust the pattern of consumption to the pattern of production. It does not matter, from the point of view of the ultimate balance, whether the adjustment takes the form of changing the pattern of consumption or changing the pattern of production or both. But it does matter, from the point of view of the human interest that is involved, that the state should for preference choose the method of expanding the consumption of things which it is socially desirable should be consumed in increasing quantities, rather than go about trying to cut

out 'surplus' production, whether that production is home production or production from abroad.

The point of view of expanding the consumption of things which it is socially desirable to consume is one which would require a considerable length of time to develop adequately, but I would like to draw your attention to the philosophy of Bishop Berkeley in this connexion. He was an eighteenth-century philosopher and economist who was confronted with essentially the same kind of social and economic problem arising from commercial restrictions in his day as we suffer from in our day. He said in the *Querist* that if our peasants had beef in their bellies and shoes on their feet, would not that be a desirable and eligible situation for the country as a whole, and he protested against the whole economic and social system of his day which, as he said, muzzled the ox which produced agricultural products. Well, we have an economic system which has systematically muzzled the agricultural ox, and one way of solution is to try to readjust consumption in such a way as to secure an expanding consumption of those things which we know it is socially desirable should be produced and consumed in increasing quantities by farmers and non-farmers.

The ultimate solution of our agricultural problem is a transfer of surplus agricultural population to non-agricultural production. But the tragedy is that our various nations, facing the need for that transfer, have adopted methods of industrial protection which have aggravated a scarcity of industrial products in the world as a whole instead of helping to increase the supply of such industrial products in relation to agricultural products. What we seem to need is some technique which will encourage the expansion of non-agricultural economic activity in order to relieve the surplus of agricultural labour and yet will not create scarcity or disarrange the commercial relations between various nations.

Coming now to a more intimate consideration of our special problem of landless men—the question is what attitude the state should follow. Should it attempt to create small holdings for those men, if necessary by confiscating the land of those who own larger holdings, or should it, and this is the policy I would recommend, do what it can to favour the absorption of landless men in employment at good agricultural wages by large holders who are prepared to expand their equipment and, generally speaking, increase their productive efforts? Here briefly is our experience in that connexion.

We have a Land Commission which formerly existed in order to transfer the ownership of the land from an alien land-owning class

to the native tenants. We have now completed that process of transfer, and since 1933 the Land Commission has had the legal power to take possession of any holding whether it has been bought out under former Land Acts or not. In other words, every person with 50 or 100 acres of land or more is liable to have his holding taken possession of by the Land Commission in order to provide 20- or 30-acre holdings for so-called landless men. The effect has been to undermine the value of large holdings as a possible basis of credit and, incidentally, to undermine any tendency which owners of large holdings might have had to expand their capital equipment and to modernize their productive methods.

This particular aspect of the Land Commission's activities has been commented on very severely by the Banking Commission. Up to now the policy followed has been to expand the number of small holdings in a country in which the average size of holding is only 30 acres. In the last eight or ten years 14,000 landless men have been given new holdings at a cost which has meant to the state an addition of eight and a half million pounds to the dead-weight national debt, because every holding thus created involved a free gift of the equivalent of £600 to the person receiving that holding. On the assumption that there are some 80,000 landless men who require provision of some kind, this particular method of providing for their needs would involve the state in an addition to the national debt of £600 multiplied by 80,000. It would amount to £48 million in a country in which the national income does not exceed £150 million a year. In other words, along that line of approach nothing but national bankruptcy confronts us.

On the other hand, if the state, following the advice of the Banking Commission, is prepared to give a square deal to the owners of relatively large farms—the 50,000 people who employ the 130,000 wage-paid workers and who operate holdings of 50 acres or more—I myself see no difficulty whatever in the absorption of additional agricultural labour by those 50,000 employers. I know myself of one 200-acre farm which employs 20 workers. It happens to have 40 milch cows and 2,000 poultry and goes in extensively for cheese-making and so on. The people employed on that farm are better off in every real sense of the term than the typical uneconomic or even the so-called economic landholder who has been given a 20- or 30-acre allotment in any part of the country. Assuming that we really want to improve the position of the agricultural producer in general, whether we call him worker for hire or simply producer, to my mind the best hope of doing so is to strengthen the position

of the large farmers who are prepared in certain events to give good employment to agricultural labourers, and to make it possible for them economically to absorb the 60,000 additional workers who could only be absorbed as uneconomic allotment holders at a terrific cost by way of addition to the national debt. I mention this mainly in order to draw your attention to the existence of that valuable Banking Commission Report which, I think, will one day be recognized as an historic document not unworthy of comparison with the famous Bullion Report of 1810. I would draw your attention to it especially because it contains not only accurately recorded economic facts but a competent analysis of these economic facts, and because it discusses financial and monetary problems with a very intimate consciousness of underlying economic realities and of the human background. I think it is of interest not only to Irish people but to people interested in these problems everywhere.

One final remark. On a former occasion I compared the relation between experts and politicians with the relation that exists between the surgeon who does the operation and the anaesthetist who operates the gas-bag. I represented that the politician's primary function in public life was to keep the gas-bag well down over the head of the patient while his technical expert got on with whatever job of economic surgery was on hand for the time being. I deprecated any attempt on the part of the politician to depart from his special function of operating the gas-bag or to seek to obtain possession of the knife which should be left in the hands of the expert. But I am not quite sure that that is a satisfactory illustration of the relation between the expert economist and the politician. Especially now that I am both economist and politician I would be inclined to say that economists owe a duty to the public not only in the ascertainment of objective truths but in the effort to bring those objective truths before public opinion; in so far as their activity is in the function of 'putting it across', as you say in this country, economists must necessarily be politicians as well. I am not suggesting that economists should rival those politicians who are primarily experts in the art of dope-peddling, but I do suggest that we should try to bring before the public mind the stimulating essences of truth. In so far as we do so, we are performing a valuable function, different in its kind but just as valuable in its way as anything we can achieve by way of being mere truth-seekers. In so far as this Conference is fulfilling that valuable function, I think it is performing a very worthy function not only here but in the world as a whole.

SECTIONAL GROUP MEETINGS

IN addition to the main sessions of the Conference which are reported verbatim in this volume, six formal group sessions met to discuss special aspects of work in agricultural economics. The following are brief statements of the subjects discussed.

INTERNATIONAL USE OF AGRICULTURAL STATISTICS

C. E. Ladd, Dean of Agriculture, Cornell University, U.S.A., was chairman, and G. S. Dunnett, Imperial Economic Committee, London, England, opened the discussion by emphasizing the increasing use of agricultural statistics for international purposes and outlining the main deficiencies of available statistics for the purpose. The points raised by the opener and subsequent speakers were: The international use of agricultural statistics had been officially recognized since the International Institute of Agriculture was established early in the century. The available statistics had been improved, but the increasing and more detailed use of the statistics for agricultural and trade policy increased the significance of the deficiencies in compilation. Agricultural statistics were compiled primarily for national purposes, and, therefore, the methods, units, conversions, and so on were designed to suit the national conditions and requirements. Efforts to make statistics comparable and uniform from one country to another were subject to this essential difficulty. Greater emphasis should therefore be laid on getting accuracy and reliability in the national statistics and understandable statements of the methods adopted. Exporting countries pointed out that it was as important to them to get adequate statistics and analysis of consumption in the importing countries as to get the production statistics of those countries. The figures of *per capita* consumption for a whole country derived from estimates of 'disappearance' were insufficient in themselves for accurate estimation of trends.

Those taking part in the discussion in addition to the opener were: O. C. Stine, Bureau of Agricultural Economics, Washington, D.C., U.S.A.; T. W. Grindley, Dominion Bureau of Statistics, Ottawa, Canada; H. Krause, Berlin, Germany; V. P. Timoshenko, Food Research Institute, California, U.S.A.; C. Y. Hsiang, China; H. C. Taylor, Farm Foundation, Chicago, U.S.A.; R. L. Gillett, New York State, U.S.A.; R. Freund, Sweden; W. Seedorf, Göttingen,

Germany; P. H. Ferguson, Ottawa, Canada; S. A. Freifeld, International Institute of Agriculture, Rome, Italy; and A. Peterson, Washington, D.C., U.S.A.

RESEARCH IN FARM MANAGEMENT

H. C. M. Case, University of Illinois, U.S.A., was chairman. W. H. Senior, Department of Agriculture for Scotland, opened the meeting with an account of the conditions which influenced farm management research in Scotland and gave an outline of the organization by the Department of Agriculture and the three Agricultural Colleges. A. D. Imper, North of Scotland College of Agriculture, outlined the work in the academic centres under the Scottish scheme. S. C. Hudson, Department of Agriculture, Ottawa, Canada, dealt with the work in Canada; M. Rolfes, University of Berlin, Germany, with the German organization; E. G. Misner, Cornell University, U.S.A., with the work organized in New York State by Cornell University; M. L. Mosher, College of Agriculture, Illinois, U.S.A., with developments in the State of Illinois; A. W. Menzies Kitchin, School of Agriculture, Cambridge, England, with the system and projects in England; E. B. Hill, Michigan State College, U.S.A., with projects in the State of Michigan. From a more general point of view G. A. Pond, University of Minnesota, U.S.A., gave the results of an analysis of the methods used in farm management studies in U.S.A. in the previous five years; A. W. Ashby, University College of Wales, Aberystwyth, Wales, discussed the aim of farm management work in fitting farms into the general economic environment; and J. A. Hopkins, State College of Agriculture, Ames, Iowa, U.S.A., dealt with the importance of having representative data.

RESEARCH IN MARKETING

A. M. Shaw, Director, Marketing Service, Department of Agriculture, Ottawa, Canada, was chairman, and M. P. Rasmussen, Cornell University, U.S.A., opened the session with a general review of the problems of marketing research under the main headings of (a) the purposes of market research; (b) the general methods of approach; and (c) the difficulties encountered and their possible solutions. The main points introduced by the opener and taken up by other speakers were as follows: (1) There is a primary difficulty in getting reliable and fairly complete information which is largely confidential and has to be taken from the books of various competing firms. The integrity of the research worker is of paramount importance. Some later speakers pointed to the value of marketing

boards and regulating authorities for making knowledge of distribution available. (2) There is a danger of research projects being too big in order to cover a large field, with the result that the time taken with the field work and analysis throws the report of results so late that it has little more than historic interest. Studies might be broken up into small logical units which could be finished within a reasonable time. One speaker noted that the taking of a series of small segments ran the risk of leaving the whole picture incomplete. (3) There is a constant pressure to make market research subservient to marketing policies instead of determining the facts as they are. One speaker emphasized that since government and other agencies were operating forces necessary for furthering collective policies, it was all the more necessary that the academic institutions should preserve the balance by studying how the interests of the individuals were affected by policy as well as by the ordinary movements of the market. The needs of consumers, the requirements and the operation of the market, the movement of goods, and the reaction of the requirements of the market on producers were the basic field of market studies.

Those taking part in discussion in addition to the opener were: F. F. Lininger, Pennsylvania State College, U.S.A.; C. G. McBride, College of Agriculture, Columbus, Ohio, U.S.A.; R. C. Ashby, University of Illinois, U.S.A.; F. M. Clement, British Columbia University, Vancouver, Canada; Leland Spencer, Cornell University, New York State, U.S.A.; W. J. Tawse, Quebec Department of Agriculture, Canada; L. J. Norton, University of Illinois, U.S.A.; W. W. Fetrow, Farm Credit Administration, Washington, D.C., U.S.A.; Miss R. L. Cohen, Agricultural Economics Research Institute, Oxford, England; and W. B. Silcox, Extension Service, Department of Agriculture, Washington, D.C., U.S.A.

THE SIGNIFICANCE OF ECONOMIC EXTENSION WORK IN AGRICULTURAL EDUCATION

S. J. Chagnon, Director of Extension Service, Quebec Department of Agriculture, Canada, was chairman. H. M. Dixon, Agricultural Economics Extension Section, Division of Co-operative Extension, U.S. Department of Agriculture, Washington, D.C., U.S.A., opened the discussion with an outline of the aims and methods of the Economic Extension Service in U.S.A. In summary, the ultimate objective of the service was to reach as great a number of individual farmers as possible and to assist them with their economic problems, and the central theme running through the entire

programme had been: (1) to help farm people to get a higher income and maintain a high standard of rural life; (2) to base recommendations on facts and the best information available; (3) to correlate the economic phase of the work with the entire extension programme; and (4) to assist in formulating and carrying out agricultural action programmes involving economic problems. Accounts of extension work in various states and countries were given as follows: Germany by M. Rolfes, University of Berlin, Germany; Poland by S. Schmidt, University of Cracow, Poland; Hungary by I. Szladits, Department of Agriculture, Budapest, Hungary; Canada by W. M. Drummond, Ontario Agricultural College, Guelph, Ont., Canada; and the State of Illinois by J. B. Cunningham, University of Illinois, U.S.A. H. R. Varney, Vermont, U.S.A., spoke on the Place of Land Use in Economic Extension Work.

RURAL REHABILITATION AND RESETTLEMENT

J. I. Falconer, Department of Rural Economics, University of Ohio, U.S.A., was chairman, and the discussion was opened by C. C. Taylor, Bureau of Agricultural Economics, Washington, D.C., U.S.A., who spoke on the problems of the resettlement and rehabilitation programmes of the Federal Farm Security Administration and pointed out the social principles involved. A. W. Menzies Kitchin, School of Agriculture, Cambridge, England, gave a critical survey of land settlement policy in Great Britain. H. Krause, Berlin, Germany, raised the importance of part-time holdings for industrial workers illustrated by the developments which had resulted from industrialization in Württemberg and the Saar Basin in Germany and the deliberate efforts along a similar line by the Ford firm in U.S.A. S. Higginbottom, University of Allahabad, India, referred to attempts by the Government to shift population in India from densely populated to more sparsely populated areas. Others who took up various points raised by these speakers were: R. A. Griffin, U.S. Department of Agriculture, Washington, D.C., U.S.A.; A. W. Ashby, University College of Wales, Aberystwyth, Wales; and W. Seedorf, University of Göttingen, Germany.

PRICE ANALYSIS

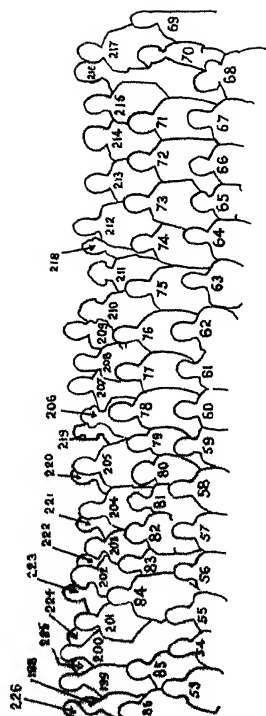
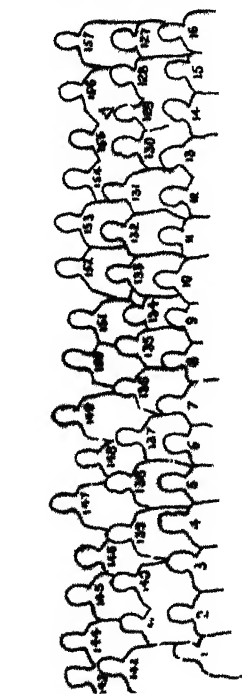
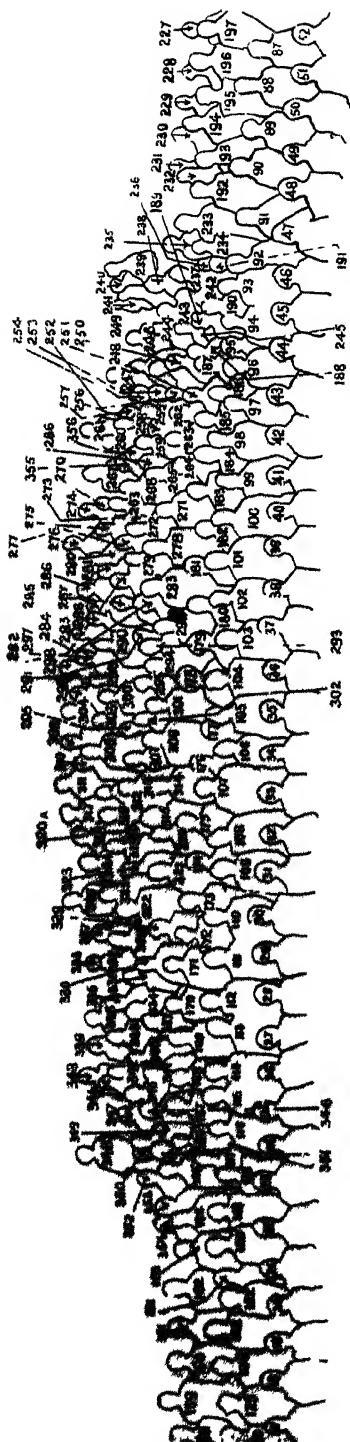
H. C. Taylor, Farm Foundation, Chicago, U.S.A., was chairman, and Elmer Working, University of Illinois, U.S.A., opened the discussion by dealing with some of the dangers associated with careless use of statistical techniques and by pointing to some of the 'frontiers' of price analysis. In a controlled economy there was necessity for

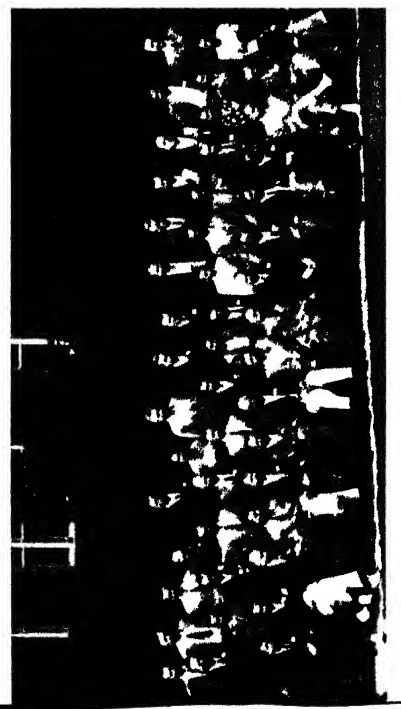
a greater emphasis on the analysis of effects of different price relationships. Under a condition of general governmental control, the effects of errors in interpretation may be much more serious than those resulting from faulty price analysis in a freely competitive economy. The discussion dealt mainly with detailed points of technique; the limitations encountered in certain types of analysis; and the validity of results from certain types of data. Those taking part in discussion in addition to the opener were: E. C. Hope, University of Saskatchewan, Canada; M. Ezekial, Agricultural Adjustment Administration, Washington, D.C., U.S.A.; Miss R. L. Cohen, Agricultural Economics Research Institute, Oxford, England; L. H. Bean, Agricultural Adjustment Administration, Washington, D.C., U.S.A.; H. Anderson, New York City, U.S.A.; A. B. Lewis, Farm Credit Administration, Washington, D.C., U.S.A.; V. P. Timoshenko, Food Research Institute, California, U.S.A.; and E. Jensen, Bureau of Agricultural Economics, Washington, D.C., U.S.A.

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INTERNATIONAL CONFERENCE OF AGRICULTURAL ECONOMISTS

CONFERENCES

First, 1929: Dartington Hall, Totnes, Devon, England.

Second, 1930: Cornell University, Ithaca, New York State, U.S.A.

Third, 1934: Bad Eilsen, Schaumburg-Lippe, Germany.

Fourth, 1936: St. Andrews University, Fife, Scotland.

Fifth, 1938: Macdonald College, Ste Anne de Bellevue, P.Q., Canada.

THE International Conference of Agricultural Economists was inaugurated during the summer of 1929, when fifty economists from eleven countries met for two weeks at Dartington Hall, Devon, England, on the invitation of Mr. L. K. Elmhirst. The Second Conference was held in 1930 at Cornell University, U.S.A., and was attended by over 300 members and visitors, twenty countries being represented. At this meeting the formal Constitution was drawn up and approved. The Third Conference, held at Bad Eilsen, Germany, in 1934, was attended by 170 members, nineteen countries being represented. The Fourth Conference was held at St. Andrews, Scotland, when 219 members and visitors attended, of whom 127 were from twenty-one countries outside of the United Kingdom. The Fifth Conference, at Macdonald College, Canada, in 1938 was attended by 510 members from twenty-three countries.

The Conference has now a total membership of 476, with thirty-four National or Area Groups. Its representative character has been steadily growing since the first informal gathering in 1929, until it now embraces the majority of countries where the study of agricultural economics is pursued.

The object of the Conference is that of fostering development of the sciences of agricultural economics and of furthering the application of the results of economic investigation of agricultural processes and agricultural organization in the improvement of economic and social conditions relating to agriculture and rural life.

Membership shall consist of individuals who pay £1, Rm. 20, or \$5, or such sum as the President may reasonably declare to be the monetary equivalent of £1, for one Conference period (which shall

be the period from the end of one Conference to the end of the next). The majority of members are professional agricultural economists engaged in research, teaching, or public administration, but the membership is representative as well of a wide range of agricultural and economic interests. Applications may be made to the Secretary, who will put the applicant in touch with the appropriate national correspondent.

Meetings are held at intervals of two or three years, at a time and place determined by the Council. No two successive meetings can be held in the same country. The meetings afford a unique opportunity of personal intercourse with fellow-workers from all parts of the world.

The Proceedings consisting of papers and discussions at each Conference are published, and one copy free of charge is sent to each member. Extra copies may be purchased by members at reduced rates. Copies of the Proceedings of the First, Second, Third, Fourth, and Fifth Conferences are available on application to the Secretary, or to Dr. C. E. Ladd, Department of Agricultural Economics, Cornell University, Ithaca, N.Y., U.S.A.

AMENDED CONSTITUTION

NAME AND OBJECT

The name of the organization shall be The International Conference of Agricultural Economists.

The object of the Conference is that of fostering development of the sciences of agricultural economics and of furthering the application of the results of economic investigation of agricultural processes and agricultural organization in the improvement of economic and social conditions relating to agriculture and rural life.

MEETINGS

Meetings shall be held at a time and place determined by the Council. No two successive meetings shall be held in any one country.

MEMBERSHIP

Membership shall consist of individuals who pay £1, Rm. 20, or \$5, or such sum as the President may reasonably declare to be the monetary equivalent of £1, for each Conference period (which shall be the period from the end of one Conference to the end of the next).

Libraries, corporations, and similar institutions may become members if a duly accredited representative is appointed by each such institution.

The Conference on the recommendation of the Council may elect honorary life members.

NATIONAL OR AREA GROUPS

The members of the Conference in each country (or in a group of countries) may form a National (or Area) Group. Each such Group shall make provision for the election of a Chairman of the Group, and may provide for the appointment of a secretary of the Group, for each Conference period. The Chairman or secretary, as may be designated by the Group, shall be the correspondent of the Group.

EXECUTIVE OFFICERS

The Executive Officers shall be a President and a Secretary-Treasurer, both of whom shall be elected by the Council at a formally constituted meeting held during a Conference, and shall hold office for a period ending with the close of the next succeeding Conference. The Executive Committee, in the event of the inability of the President to fulfil his duties, shall elect an acting-President who shall hold office until the first session of the next Conference, at which time the Council shall elect a President of the Conference to hold office for the period of the meeting of that Conference.

HONORARY OFFICERS

The Conference on recommendation of the Council may elect Honorary Vice-Presidents for life.

COUNCIL

The Council shall consist of the Executive Officers as ex-officio members together with members of each National or Area Group as hereinafter provided.

(a) A National or Area Group having 5 or more members may elect one member of Council; having 10 and not exceeding 25 members, two members of Council; having over 25 and not exceeding 60 members, three members of Council; having over 60 members, four members of Council; the maximum number of members of Council for any electing Group shall be four.

(b) Members of the Council shall be elected and hold office for a Conference period.

(c) Method of election of Members of the Council shall be left to the discretion of each electing Group.

EXECUTIVE COMMITTEE

The Executive Committee shall consist of the two Executive Officers and the duly elected Chairmen of all National or Area Groups having five or more members.

The President of the Conference shall be the Chairman of the Executive Committee.

The Secretary of the Conference shall be the Secretary of the Executive Committee.

The acts of the Executive Committee shall be subject to the approval of the Council.

It shall be the duty of the Executive Committee to act for the Council between meetings of the Council.

*PROVISION FOR TEMPORARY ORGANIZATION
OF GROUPS*

Where no Group has been constituted the President may appoint a representative to canvass for members in the country or area and to make arrangements for the proper organization of a Group under the Constitution.

AMENDMENT OF CONSTITUTION

The Constitution may be amended by a majority vote at any Conference provided the amendment has previously received the approval of a majority of the Council.

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(For 1936-8)

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